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APPENDIX TO THE JOURNALS
OF THE
SENATE AND ASSEMBLY
OF THE
TWENTY-NINTH SESSION
OF THE
LEGISLATURE OF THE STATE OF CALIFORNIA.
P. P. PUBLIC LIBRARY
VOLUME I.



SACRAMENTO:
STATE OFFICE, : : : : A. J. JOHNSTON, SUPT. STATE PRINTING.
1891.

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INAUGURAL ADDRESS

OF

GOV. H. H. MARKHAM,

DELIVERED JANUARY 8, 1891.

Before the Twenty-ninth Session of the Legislature of California,
in Joint Convention Assembled.



SACRAMENTO:

STATE OFFICE, : : : : A. J. JOHNSTON, SUPT. STATE PRINTING.
1891.

INAUGURAL ADDRESS.

Members of the Senate and Assembly:

FELLOW CITIZENS: You have just witnessed the final act constituting me Governor of this State. To the people that so generously bestowed upon me this exalted position—the highest in their gift—I return my grateful thanks, and assure them that I feel the deepest gratitude. While I fully appreciate the great honor they have conferred upon me, I am also mindful of the grave and serious responsibilities that accompany that honor.

It shall be my earnest prayer that He, who controls the destinies of all people, may grant me the wisdom, strength, and courage to meet these responsibilities as they may arise during the next four years, in such a manner that I shall justly merit the approbation of those who have confided to me this great trust.

I take pleasure at this time in saying that I am much pleased with the personnel of this Legislature, and I think that the people should be congratulated upon the selection they have made of the gentlemen to represent them. I believe you have assembled here with honest intentions, and with a firm determination to do your full duty to the people of the whole State. I trust that you will make for yourselves a reputation that shall equal, if not surpass in excellence, the record of any preceding Legislature, and one that future Legislatures may wisely emulate. It is my earnest desire to work in entire harmony with you, and to be able to approve every item of your legislative work.

In your hands, as members of this Legislature, rests the entire responsibility for your branch of the State Government, and I shall leave it there, assured that the people of the State will grant to you just and full credit for all your official acts, over which I shall not attempt to exert undue influence. It is a pleasure as well as a duty, however, to tender to you, and to each of you, at all times during your deliberations, such assistance as is in my power to give, and I very cordially invite you to inform me of any fact, which, in your judgment, the Executive should know, or that will benefit you in your official capacity, or the interests you represent.

It would be more in accord with my ideas to close my address at this point and to send to your honorable bodies, from time to time, recommendations on the various subjects which will occupy your attention, but, yielding to the force of precedent, I will now communicate to you my views upon some of the more important matters.

The last State election brought very prominently before the people the question of economy in the expenditures of public moneys. In presenting my views upon this subject, it is not my purpose to discuss questions of politics for the purpose of criticising either of the great political parties of the State. But I may be permitted to say that the Republican party, in Convention assembled in this very chamber, on the thirteenth day of August last, took the initiative on this question and placed in its platform a plank declaring that the State finances should be handled with honesty and rigid economy. As I then and there accepted the conditions imposed by that Convention, and many times

thereafter promised the people of the State that, if elected, I would adhere to the pledge made by my party, I deem it proper at this time to state briefly what I consider to be our duty to the people in this respect.

The appropriations made by the last Legislature imposed a burden upon the taxpayers which was so great that, in many instances, people found it exceedingly difficult to procure means with which to pay their taxes. In response to the almost unanimous demand of our citizens for lower taxation, the Republican Convention made a pledge to the people of the State that the nominees of their party, if elected, would limit the rate of annual State taxation to 50 cents on each \$100 of assessable property. This radical departure from all precedents in Conventions in this State, as evidenced by their platforms, was fully sustained at the polls, and we, who are clothed with official power by the people, and who are their representatives, are in duty bound to carry out their wishes.

The great burden of this work necessarily rests with you, and I sincerely trust that you will so guard the finances of the State and so equitably distribute the appropriations for all purposes, that the limit prescribed shall not be exceeded. If this pledge is honorably and faithfully adhered to, you will receive the commendations of a grateful people, irrespective of party affiliation.

For your own convenience and as a precaution against errors, I would suggest the adoption of a similar method to that adopted by our national legislators. While it does not appear of record, yet as a matter of fact, the leaders of the party in power in Congress agree upon a gross sum, which constitutes a limit of appropriations, that Congress does not exceed. Then the amount is ascertained which is necessary to meet the fixed charges—that is, amounts arbitrarily fixed by law. The balance is then apportioned according to necessity, or the merits of the subject under consideration. For instance, they agree upon so many millions for public buildings, so many millions for rivers and harbors, so many millions for pensions, and so on, and these various limits are rigidly enforced.

This method, as you can readily perceive, gives to those who are responsible for the acts of the party in power a perfect understanding of what expenditures any particular Congress will be permitted to make.

You have been spared the labor of determining this limit, for the Republican party, as I have said, fixed a limit of 50 cents and the Democratic party one of 45 cents on the \$100 of assessable property, thereby removing all responsibility in that regard on the part of any of your members.

Bearing in mind this limit, I advise you, at the very beginning of your deliberations, to ascertain as nearly as possible the gross receipts from all sources, and to keep strictly within that limit in your appropriations. After deducting the fixed charges, apportion the balance where most needed, and in proportion to the necessities of the public wants and official demands. You will be compelled to ignore many local demands, and I am in hopes that there is not a member of this Legislature who will endeavor to build up his political reputation by advocating appropriations which, at this time, are necessary only to fortify himself in his particular locality.

History teaches us that members of legislative bodies, by a series of trades with their associates, and with a view of advancing the personal aspirations of each, load the taxpayers with excessive burdens. The

last Legislature, in particular, suffered at the hands of the people the severest criticism in this regard, and I confidently trust that you will not permit such motives to influence your actions, for nothing would grieve me more than to be compelled to disapprove any of your acts.

WORLD'S FAIR.

What your duty may be in regard to providing means to properly and befittingly represent California at the World's Fair, in 1893, is a difficult question to solve; involving, first, the constitutionality of such an Act; second, the advisability of making an appropriation; and, third, the amount to be appropriated. As to the amount, it is to my mind a purely business proposition, and in dealing with the question you should be guided largely by the benefit which, in your judgment, may inure to the citizens and taxpayers of the State by that method of advertising our products and resources to the patrons of the exposition, which, in fact, will be to the whole world.

Whatever appropriation is made for this purpose should be considered an extraordinary expenditure, and not necessarily one included in the expense of carrying on the State government.

LABOR.

You will be called upon to devise some satisfactory plan for arbitration of disputes and controversies relative to wages and hours of labor, between those who labor and those who employ labor.

The magnitude of the subject should not deter you from making a careful investigation, and I am sure that in your combined efforts you will devise a plan that will be satisfactory in its provisions to both employer and employé, and through which may come that perfect understanding between both parties, so necessary to the success of many enterprises, the preservation of peace and harmony among neighbors, and the elimination of those hardships to the workingmen and those dangers to capital resulting from strikes.

It is claimed by organized bodies of labor, through communications to me, that the eight-hour law on our statute books has been evaded. If the failure to enforce the law arises from an inherent defect in the law itself, I trust that you will remedy the same.

COMMISSIONS.

You will observe that the retiring Governor, in his biennial message to the Legislature of the twenty-eighth session, says, "that upwards of \$100,000 are expended in the support and maintenance of Commissions and Bureaus; that many of them have been useful, but have outlived their usefulness; while others have been of little use save to those holding offices under them." It is to be deeply regretted that he should retire from office without informing you specifically upon this subject; that is, without pointing out the particular Commission or Bureau that could be dispensed with, that you might take steps to ascertain the situation, and if found expedient, cause the same to be abolished at once. I can only say that \$100,000 is a large outlay for useless purposes, and I believe it to be your duty to make all proper efforts to ascertain the truth of this assertion and govern yourselves accordingly.

Hon. John P. Dunn, the retiring Controller, in his last report says:

In making the estimates of expenditures embodied in this report, I have followed the mandates of the law as it exists, but in doing so I do not desire to be regarded as acquiescing either in the wisdom or necessity of many of the laws. Instead, there are expenses, aggregating large sums, which, in my judgment, are useless for any good purpose whatever, and which ought not to exist as an expense to the State.

I have read with much interest the able report of the Controller; but I am compelled to say that the same would have been much more satisfactory to me, and I doubt not to you, had he given us in detail the particular laws and the items of expense which he deemed vicious and useless. The taxpayers have a right to know the facts in all such matters as they exist, and it is to be hoped that you will give this subject your immediate and earnest attention, to the end that such abuses may be corrected.

BALLOT REFORM.

During the last campaign I received many communications, asking for an expression of my views on the Australian ballot system, which I answered by saying that I had no prejudices either for or against the system, and would approve any law that would materially improve the method now in use in this State. Nothing has transpired that has caused me to change my views, but I suggest that you make a thorough examination of the practical workings of the Australian system before determining to adopt it instead of our own. Every honest voter would hail with joy the adoption of this or any other method of conducting elections, whereby the sacredness of the ballot-box would be better preserved.

If, in your judgment, our present system needs revision, I suggest that all the features of our present law which are practical and effective be retained, and those features of the Australian or other system, which may be considered beneficial, be added thereto or incorporated therein.

APPORTIONMENT.

The increase in population in many sections of the State, during the past few years, has been so great that the present apportionment, constituting the Senatorial and Assembly Districts, does not give representation in proportion to population.

Under the Constitution, the number of Representatives cannot be increased, and certain localities will necessarily have decreased representation, while others should be increased. In view of this fact, the State should be redistricted, in accordance with Section 6 of Article IV of the Constitution, which contains the following language:

And the Legislature shall, at its first session after each census, adjust such districts and reapportion the representation so as to preserve them as near equal in population as may be.

I therefore urge that you prepare and enact the necessary measure, in a spirit of justice and on a basis of fairness to all sections of the State, so that each county shall have equal and exact representation in the Legislature, in the proportion that its population bears to that of the whole State.

CHINESE.

All political parties in this State agree upon the propriety of the exclusion of the Chinese, and are anxious that the law forbidding their

importation shall [be strictly enforced. The law is being constantly violated, and the influx of these people is very great. Congress should be requested to take steps to enforce the law as it stands, to remedy the present law wherever it may be found defective, and to extend the date as far beyond 1892 as possible. Provision should be made for guarding the borders now almost wholly unprotected.

I also recommend that you request Congress to provide means, whereby the insane among the Chinese can be returned to their own country. You will observe by the reports of the Stockton Insane Asylum that there are now one hundred and thirty in the various institutions, who are cared for at an annual cost of \$18,000, and are occupying room required for the comfort of our own citizens.

IRRIGATION AND FORESTRY.

It was not my intention to make any suggestion upon the subject of irrigation, as the reports of the practical working of the Wright bill appear to be favorable and encouraging.

I am, however, in receipt of an official communication from the State Board of Forestry, to which briefly I desire to call your attention. I think each of you will agree with me, that the future prosperity of the State is inseparably bound up in the assured continuance of an abundant, unstinted supply of water for irrigating purposes; and that the never-failing character of the streams and watercourses is greatly dependent upon maintaining and preserving the timber which shades and protects the sources from which the supply is derived.

The Board says, however, in this communication, that there is imminent danger to this preservation, and that the abuse of the law, as it now stands, "is at all times a menace to the industries dependent upon irrigation." This official statement is entitled to serious consideration, on account of the magnitude of the evils which would follow the destruction of the timber, and the consequent diminution of the supply of water for irrigation. I therefore recommend that, if upon investigation, the law as it stands is capable of abuses, which, as stated, menace the future prosperity of the State, it be remedied immediately.

HYDRAULIC MINING.

One important branch of our industries, that of hydraulic mining, is at a standstill, and will never be revived, unless vigorous steps be taken by the General Government.

Congress and the Courts have placed the strong and powerful arm of the law upon this industry, and crushed it out of existence. I need not repeat its history, for it is familiar to all of you and to the people of the State. No relief could be expected from the General Government, were the workings of these mines beneficial to the interests of this State alone. It was from the gold fields of California, however, that the millions were taken that assisted this nation so materially in her greatest financial peril.

These same gold fields have yielded the enormous amount of nearly a billion and a half of the precious metal, thereby replenishing the treasury of the United States with that needed medium of exchange. It is said that it will be difficult, if not impossible, to devise means whereby the

gold can be extracted in paying quantities without harm to the farm owners in the valleys, or injury to the navigation of certain streams. If that be true, it should be avoided. But I have such confidence in the combined wisdom of the sixty-six millions of people in this country, that I feel safe in saying that if an earnest effort were made on the part of the General Government, for that purpose, the result would be accompanied with profit to the whole country.

In my judgment, no industry would more richly repay a reasonable outlay on the part of the Government than this.

I suggest, therefore, that the subject be thoroughly agitated, Congress memorialized, and our Senators and Representatives urged to take all necessary steps to bring the matter properly before Congress at the earliest moment possible. Congress properly expends thousands of dollars every year in experiments and investigations which, in the opinion of its members, will promote the public interests of the country. For instance, a special committee has been created on irrigation of arid lands, and a liberal appropriation is annually made for the purpose of studying the subject. The most thoroughly qualified men of the age are employed for this work, and all the means that science and skill can evolve are brought into requisition in solving the problems. Many other instances, familiar to all, of the liberal action of the Government, could be cited. Why should not Congress treat this question in a similar manner, and assist in a solution of the difficulties surrounding the production of gold? It is a matter of national interest, for this metal is accepted by all men as a medium of exchange. Within the borders of California, millions upon millions of gold are locked up in the bowels of the earth, awaiting the genius of man to devise some feasible method of release, and I urge you take the initiative in obtaining the assistance of the Federal Government.

There are many subjects, which I have not mentioned, upon which I will communicate my views to you, from time to time, during the session.

Before closing, permit me to say, that as members of this great nation, we should feel truly grateful that our country is at peace with all the world and is so highly respected by the nations of the earth.

Every person, within the borders of our own State, should feel a just pride in the high position she now occupies in the great sisterhood of States.

Nothing could be more encouraging than the present outlook, affecting nearly every branch of her industries. The legislation in the first session of this Congress, is especially encouraging to the rapid development of a very large number of our chief horticultural and mineral resources.

Those interested in the production of the raisin, the orange, the prune, and other fruits, and in the manufacture of sweet wines, have received substantial encouragement from the General Government.

The vast silver mines show very gratifying and largely increased activity, while the immense deposits of tin, so long known to us, but absolutely valueless, are now being developed, and will add enormously to our productions.

Thanking you for your very kind attention, I wish you, individually and as the representatives of the people, a pleasant, harmonious, and eminently successful session.

CALIFORNIA.

BIENNIAL REPORT

OF THE

STATE CONTROLLER

FOR THE

FORTIETH FISCAL YEAR ENDING JUNE 30, 1889, AND THE FORTY-
FIRST FISCAL YEAR ENDING JUNE 30, 1890.



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SACRAMENTO:

STATE OFFICE, : : : : : J. D. YOUNG, SUPT. STATE PRINTING.
1890.

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REPORT.

STATE OF CALIFORNIA, CONTROLLER'S DEPARTMENT, }
SACRAMENTO, November 19, 1890. }

To Hon. R. W. WATERMAN, Governor of California:

SIR: In accordance with the requirements of law, I have the honor, herewith, to submit the report of this department for the fortieth fiscal year, ending June 30, 1889, and the forty-first fiscal year, ending June 30, 1890, embracing exhibits showing the receipts and disbursements for the support of the State Government, and the condition of the several funds of the Treasury, together with such other information and suggestions as it is made the duty of the Controller to report upon.

Tabulated statements, showing in detail the various transactions of each fiscal year, will be found under proper headings in the Appendix, and correctly indexed.

STATE TREASURY.

The following comparative exhibits show the Controller's ledger balances of the several funds, the amount of outstanding Controller's warrants and balances, the aggregate of which shows the total amount of money in the State Treasury at the close of the fiscal years ending June 30, 1888, June 30, 1889, and June 30, 1890; also, the increase in the amount of money in the State Treasury at the close of each as against that of the former fiscal year:

ANNUAL STATEMENT

Showing the Condition of the Several Funds at the Close of the Fortieth Fiscal Year, ending June 30, 1889.

FUNDS.	Balance on Hand.	Warrants Outstanding.	Balance in State Treasury.
General Fund	\$331,812 94	\$175,976 09	\$507,789 03
School Fund	302,348 20	56,498 87	358,847 07
Interest and Sinking Fund	156,423 64	79,140 00	235,563 64
State School Land Fund	251,584 65	571 95	252,156 60
State School Land Deposit Fund	1,460 00		1,460 00
San Francisco Harbor Improvement Fund	250,772 96	2,217 51	252,990 47
University Fund	2,529 32		2,529 32
State University Fund	8,424 83		8,424 83
Mining Bureau Fund	246 53		246 53
State Library Fund	34,923 82		34,923 82
Supreme Court Library Fund	232 63		232 63
Leprosy Fund	141 00		141 00
War Bond Fund	5,298 37		5,298 37
Yosemite Valley Fund	481 43		481 43
Adult Blind Fund	8,059 79	130 00	8,189 79
Revolving Jute Fund	40,000 00		40,000 00
Estates of Deceased Persons Fund	82,716 94		82,716 94
Interest and Sinking Fund, Levee District No. 5	8 26		8 26
Election Reward Fund	1,513 44		1,513 44
Railway Tax Fund	169 72		169 72
Railway Tax Contingent Fund	627 98		627 98
Fish Commission Fund	19 05	1,055 76	1,074 81
San Quentin State Prison Fund	168,564 37	359 29	168,923 66
Folsom State Prison Fund	11,359 68		11,359 68
Insurance Commissioner's Special Fund	1,411 10		1,411 10
Bank Commissioners' Fund	531 09	1,200 00	1,731 09
State School Book Fund	79,270 12	159 07	79,429 19
State Drainage Construction Fund	8,181 14	70 05	8,251 19
Construction Fund, Drainage District No. 1	31 50	384 91	416 41
Swamp Land District No. 1	142 49		142 49
Swamp Land District No. 2	883 30		883 30
Swamp Land District No. 17	8 00		8 00
Swamp Land District No. 18	1,040 76		1,040 76
Swamp Land District No. 41	44		44
Swamp Land District No. 45	9 85		9 85
Swamp Land District No. 46	5 24		5 24
Swamp Land District No. 49	18 70		18 70
Swamp Land District No. 51	34 08		34 08
Swamp Land District No. 59	27 29		27 29
Total amount in State Treasury, exclusive of coupon accounts	\$1,751,314 65	\$317,763 50	\$2,069,078 15
Total amount in several coupon accounts			1,400 00

Recapitulation.

Controller's ledger balance	\$1,751,314 65
Warrants outstanding	317,763 50
Total cash in State Treasury June 30, 1889	\$2,069,078 15
Total amount in several coupon accounts	\$1,400 00
Total cash in State Treasury June 30, 1889	\$2,069,078 15
Total cash in State Treasury June 30, 1888	1,549,740 97
Increase of cash in State Treasury in the fortieth as against the thirty-ninth fiscal year	\$519,337 18

NOTE.—Under the Act of March 10, 1885, the Treasurer paid drainage warrants out of the General Fund, creating the apparent discrepancy in that fund in his and the Controller's books, amounting to \$3,306 72.

ANNUAL STATEMENT

Showing the Condition of the Several Funds at the Close of the Forty-first Fiscal Year, ending June 30, 1890.

FUNDS.	Balance on Hand.	Warrants Outstanding.	Balance in State Treasury.
General Fund	\$1,727,358 45	\$106,585 12	\$1,833,943 57
School Fund	372,322 33	47,838 31	420,160 64
Interest and Sinking Fund	194,126 84		194,126 84
State School Land Fund	48,046 27	93 90	48,140 17
State School Land Deposit Fund	19,440 00	320 00	19,760 00
San Francisco Harbor Improvement Fund	267,630 52		267,630 52
University Fund	26,153 57		26,153 57
State University Fund	9,690 44		9,690 44
Consolidated Perpetual Endowment Fund of University		2,000 00	2,000 00
Mining Bureau Fund	571 05		571 05
State Library Fund	9,507 07		9,507 07
Supreme Court Library Fund	1,089 06		1,089 06
Leprosy Fund	4,126 34		4,126 34
War Bond Fund	5,298 37		5,298 37
Yosemite Valley Fund	1,325 48		1,325 48
Adult Blind Fund	5,008 40	4,356 46	9,364 86
Revolving Jute Fund	100,000 00		100,000 00
Estates of Deceased Persons Fund	88,516 20		88,516 20
Interest and Sinking Fund, Levee Dist. No. 5	8 26		8 26
Election Reward Fund	1,628 94		1,628 94
Railway Tax Fund	366 34	8,916 19	9,282 53
Railway Tax Contingent Fund	687 40		687 40
Fish Commission Fund	44 89	33 10	77 99
San Quentin State Prison Fund	111,754 59		111,754 59
Folsom State Prison Fund	12,693 33		12,693 33
Insurance Commissioner's Special Fund	2,038 75		2,038 75
Bank Commissioners' Fund	139 35	1,125 00	1,264 35
State School Book Fund	70,600 79	1,196 02	71,796 81
Grammar School Course Fund	68,026 59	831 00	68,857 59
State Drainage Construction Fund	8,301 54		8,301 54
Construction Fund, Drainage District No. 1	396 41		396 41
Swamp Land District No. 1	142 49		142 49
Swamp Land District No. 2	883 30		883 30
Swamp Land District No. 17	8 00		8 00
Swamp Land District No. 18	1,144 02		1,144 02
Swamp Land District No. 41	44		44
Swamp Land District No. 45	9 85		9 85
Swamp Land District No. 46	5 24		5 24
Swamp Land District No. 49	18 70		18 70
Swamp Land District No. 51	34 08		34 08
Swamp Land District No. 59	27 29		27 29
Southern California Insane Hospital Fund	235,000 00		235,000 00
Fish Commission Fund, purchase of boats	1,100 00		1,100 00
Total amount in State Treasury, exclusive of coupon accounts	\$3,395,270 98	\$173,295 10	\$3,568,566 08
Total amount in several coupon accounts			9,665 00

Recapitulation.

Controller's ledger balance	\$3,395,270 98
Warrants outstanding	173,295 10
Total cash in State Treasury June 30, 1890	\$3,568,566 08
Total amount in several coupon accounts	\$9,665 00
Total cash in State Treasury June 30, 1890	\$3,568,566 08
Total cash in State Treasury June 30, 1889	2,069,078 15
Increase of cash in State Treasury in forty-first as against the fortieth fiscal year	\$1,499,487 93

NOTE.—Under the Act of March 10, 1885, the Treasurer paid drainage warrants out of the General Fund, creating the apparent discrepancy in that fund in his and the Controller's books, amounting to \$3,306 72.

The following summary shows the sources of revenue and the several funds to which the receipts were apportioned, together with the total disbursements for each of the two fiscal years, details of which will be found in the Appendix, Statements 1, 2, 3, and 4:

RECEIPTS.

FROM WHAT SOURCE.	Fortieth Fiscal Year.	Forty-first Fiscal Year.
Property tax.....	\$5,038,424 95	\$7,211,414 95
Poll tax.....	340,572 84	352,927 70
State School Lands, 500,000 acres, principal.....	2,820 94	1,972 12
State School Lands, 500,000 acres, interest.....	7,321 88	1,487 92
State School Lands, 16th and 36th Sections, principal.....	196,425 48	168,630 56
State School Lands, 16th and 36th Sections, interest.....	74,950 97	47,583 90
Railway taxes, State portion.....	217,942 96	292,349 96
Railway taxes, county portion.....	370,681 89	375,776 39
Railway taxes, Contingent Fund.....	65 24	59 42
Estates of deceased persons.....	10,007 65	6,715 71
Interest on bonds held in trust for School Fund.....	165,484 47	216,943 38
Interest on bonds held in trust for University Fund.....	64,253 25	86,458 32
Interest on bonds held in trust for James Saultry Relief Fund.....	350 50	-----
Redemption, Bonds held in trust for School Fund.....	76,500 00	85,000 00
Redemption, Bonds held in trust for University Fund.....	7,500 00	2,000 00
From Secretary of State, fees.....	20,047 95	19,202 55
From Secretary of State, sales of Statutes.....	350 50	160 00
From Secretary of State, sales ballot paper.....	2,892 75	3,155 00
From Secretary of State, sales topographical maps.....	127 50	77 50
From Secretary of State, sales Irrigation Reports.....	239 75	299 00
From Secretary of State, sales Constitutional Debates.....	-----	10 00
From Secretary of State, sales coal screenings.....	135 00	-----
From Secretary of State, sales stationery.....	5 00	-----
From Secretary of State, sales old carpets.....	-----	116 20
From Surveyor-General, fees, General Fund.....	22,384 00	7,299 50
From Surveyor-General, fees, State School Land Deposit Fund.....	1,460 00	21,920 00
From Register State Land Office, fees.....	4,143 00	3,638 50
From Clerk Supreme Court, fees.....	10,740 10	11,965 90
From Superintendent Public Instruction, sales State school text-books.....	130,080 05	60,165 18
From Insurance Commissioner, fees.....	28,847 30	31,628 77
From State Board of Harbor Commissioners, rent of wharves, toll, etc., San Francisco Harbor.....	323,384 61	314,117 17
From Charles Aull, Warden Folsom Prison, receipts of prison.....	4,797 17	1,333 65
From John McComb, Warden San Quentin Prison, receipts of prison.....	206,859 64	54,763 12
From John McComb, Warden San Quentin Prison, sales jute fabrics.....	102,445 75	150,054 89
From Directors Home for Adult Blind, receipts of Home.....	12,745 17	16,808 55
From Trustees Home for Feeble-Minded Children, receipts of Home.....	2,414 75	2,663 55
From Yosemite Valley Commissioners, rents and privileges.....	5,438 97	4,145 20
From sales fish licenses.....	2,955 25	4,046 88
From fines violating fish laws.....	488 98	1,202 96
From T. I. O'Brien, License Collector, San Francisco, 10-cent stock certificate tax.....	5,272 15	6,051 55
From Bank Commissioners, from incorporated banks.....	15,300 00	15,300 00
From Treasurer Calaveras County, on account State loan.....	4,064 61	4,186 92
From Treasurer Tulare County, annulment certificates of purchase.....	49 65	-----
From Treasurer San Diego County, tax on possessory claim of William B. Tripp.....	7 50	7 50
From Treasurer Yolo County, Swamp and Overflowed Land District No. 18, principal.....	7 84	103 26
From Treasurer Yolo County, Swamp and Overflowed Land District No. 18, interest.....	3 09	
From G. A. Johnson, Attorney-General, unexpended balance of costs before United States Supreme Court in railway tax cases.....	107 45	95 50
Amount carried forward.....	\$7,481,098 50	\$9,583,899 13

RECEIPTS—Continued.

FROM WHAT SOURCE.	Fortieth Fiscal Year.	Forty-first Fiscal Year.
Amount brought forward.....	\$7,481,088 50	\$9,583,899 13
From George A. Johnson, fees attesting land patents.....	20 00	-----
From J. D. Young, Superintendent State Printing Office, sales paper scraps, etc.....	87 89	349 43
From J. D. Young, Superintendent State Printing Office, sales paper scraps, etc.....	71 55	-----
From State Board of Forestry, overdraft on warrant.....	25 80	-----
From State Board of Horticulture, overdraft on warrant....	25 83	-----
From Directors Home Adult Blind, overdraft on warrant....	9 90	-----
From Philo Hersey, excess of mileage.....	4 00	-----
From Geo. W. Faylor, Sergeant-at-Arms Senate, money re- turned.....	94 60	-----
From Wm. Fitzgerald, unexpended balance of contingent expenses of Assembly.....	14 00	-----
From R. W. Waterman, Governor, money received from United States Government for expenses incurred by State in suppression of Indian hostilities.....	11,723 64	-----
From Arthur Rodgers, unexpended balance of expenses Governor Bartlett's funeral.....	8 33	-----
From J. H. C. Bonté, Secretary Board Regents, University, sales Geological Reports.....	24 50	-----
From State Board of Fish Commissioners, sale of steamer Governor Stoneman.....	-----	1,100 00
From J. D. Ingersoll, Justice of the Peace, fines violation fish laws.....	-----	33 33
From Jas. P. Martin, Sheriff Solano County, fines violation fish laws.....	-----	26 00
Amount recovered from T. C. Van Ness.....	-----	3,985 34
From John P. Dunn, Controller, sales pure wine labels.....	-----	255 00
From Trustees State Library, overdraft of appropriation....	-----	10 09
From M. D. Boruck, duplicate warrant.....	-----	5 30
From canceled warrants.....	-----	909 16
From State Board of Examiners, money invested for relief of Jas. Saultry.....	24,500 00	-----
Transferred to Adult Blind Fund.....	21,898 14	-----
Transferred to San Quentin Prison Fund.....	14,920 00	-----
Transferred to Revolving Jute Fund.....	-----	60,000 00
Transferred to Southern California Insane Hospital Fund....	-----	350,000 00
Totals.....	\$7,554,526 68	\$10,000,572 78

APPORTIONMENT.

The apportionment of receipts to the different funds was as follows:

FUNDS.	Fortieth Fiscal Year.	Forty-first Fiscal Year.
General Fund.....	\$3,065,185 13	\$5,081,828 81
School Fund.....	2,582,013 51	2,719,743 71
Interest and Sinking Fund.....	204,738 15	205,464 03
State School Land Fund.....	275,796 07	255,602 68
State School Land Deposit Fund.....	1,460 00	21,920 00
San Francisco Harbor Improvement Fund.....	323,384 61	314,117 17
University Fund.....	64,253 25	86,458 32
State University Fund.....	101,191 76	102,471 50
Consolidated Perpetual Endowment Fund of University.....	7,500 00	2,000 00
Mining Bureau Fund.....	5,272 15	6,051 55
State Library Fund.....	20,166 95	19,362 55
Supreme Court Library Fund.....	2,148 02	2,393 18
Leprosy Fund.....		3,985 34
James Saultry Fund.....	350 50	
Yosemite Valley Fund.....	5,438 97	4,145 20
Adult Blind Fund.....	24,033 69	16,938 55
Revolving Jute Fund.....	102,445 75	150,054 89
Estates of Deceased Persons Fund.....	10,007 65	6,715 71
Adult Blind Fund, Unavailable.....	10,619 52	
Election Reward Fund.....	289 26	315 50
Railway Tax Fund.....	370,681 89	375,776 39
Railway Tax Contingent Fund.....	65 24	59 42
Fish Commission Fund.....	3,444 23	5,309 17
San Quentin State Prison Fund.....	221,779 64	54,763 12
Folsom State Prison Fund.....	4,797 17	1,333 65
Insurance Commissioner's Special Fund.....	2,000 00	2,000 00
Bank Commissioners' Fund.....	15,300 00	15,300 00
State School Book Fund.....	130,080 05	60,165 18
Grammar School Course Fund.....		74,608 59
State Drainage Construction Fund.....	44 33	120 40
Construction Fund, Drainage District No. 1.....	28 26	364 91
Swamp Land District No. 18.....	10 93	103 26
Revolving Jute Fund, transfer from General Fund.....		60,000 00
Southern California Insane Hospital Fund, transfer from General Fund.....		350,000 00
Fish Commission Fund, purchase of boats.....		1,100 00
Totals.....	\$7,554,526 68	\$10,000,572 78

DISBURSEMENTS.

Amount of disbursements from the several funds:

FUNDS.	Fortieth Fiscal Year.	Forty-first Fiscal Year.
General Fund.....	\$3,151,954 03	\$3,686,283 30
School Fund.....	2,553,806 23	2,649,769 58
Interest and Sinking Fund.....	291,820 00	167,760 83
State School Land Fund.....	139,978 07	459,141 06
State School Land Deposit Fund.....		3,940 00
San Francisco Harbor Improvement Fund.....	259,614 05	297,259 61
University Fund.....	64,287 50	62,834 07
State University Fund.....	98,348 38	101,205 89
Consolidated Perpetual Endowment Fund of University.....	7,500 00	2,000 00
Mining Bureau Fund.....	5,514 60	5,727 03
State Library Fund.....	13,074 59	44,779 30
Supreme Court Library Fund.....	2,212 80	1,536 75
Southern California Insane Hospital Fund.....		115,000 00
War Bond Fund.....	49 34	
Yosemite Valley Fund.....	5,627 94	3,301 15
Adult Blind Fund.....	35,299 74	19,989 94
Revolving Jute Fund.....	47,525 75	150,054 89
Estates of Deceased Persons Fund.....	1,391 88	916 45
James Saultry Relief Fund.....	350 50	
Election Reward Fund.....	300 00	200 00
Railway Tax Fund.....	370,661 21	375,579 77
San Quentin State Prison Fund, transfer from Jute Revolving Fund.....	14,920 00	
Fish Commission Fund.....	5,679 00	5,283 33
San Quentin State Prison Fund.....	88,795 06	111,572 90
Adult Blind Fund, transfer from Adult Blind Fund, Unavailable.....	21,898 14	
Insurance Commissioner's Special Fund.....	1,473 45	1,372 35
Bank Commissioners' Fund.....	14,957 15	15,691 74
State School Book Fund.....	64,271 42	68,834 51
Grammar School Course Fund.....		6,582 00
Totals.....	\$7,261,310 83	\$8,356,616 45

COMPARISON OF RECEIPTS AND EXPENDITURES.

From the foregoing exhibits it will be seen that the receipts of the two fiscal years exceed the disbursements to the extent of \$1,937,172 18, as follows:

Receipts for the fortieth fiscal year.....	\$7,554,526 68	
Receipts for the forty-first fiscal year.....	10,000,572 78	
Total receipts for fortieth and forty-first fiscal years.....		\$17,555,099 46
Expenditures for the fortieth fiscal year.....	\$7,261,310 83	
Expenditures for the forty-first fiscal year.....	8,356,616 45	
Total expenditures for fortieth and forty-first fiscal years.....		15,617,927 28
Excess of receipts over expenditures for the two fiscal years.....		\$1,937,172 18

NOTE.—Involved in the above expenditures for the fortieth fiscal year are the following:

Transfer from Adult Blind Fund, Unavailable, to Adult Blind Fund.....	\$21,898 14	
Transfer from Revolving Jute Fund to San Quentin State Prison Fund.....	14,920 00	
Total transfers during fortieth fiscal year.....		\$36,818 14

Transfers for forty-first fiscal year:

From General Fund to Southern California Insane Hospital Fund.....	\$350,000 00
From General Fund to Revolving Jute Fund.....	60,000 00
Total transfers during forty-first fiscal year	\$410,000 00

FUNDS.

Statements 5, 6, and 7, of the Appendix, show the condition of the various funds at the end of the fortieth and forty-first fiscal years.

The following presents a review of the principal funds:

GENERAL FUND.

The law defining the General Fund provides that it shall consist of all moneys received into the State Treasury, not specifically appropriated to other funds. The principal sum apportioned to it is derived from a tax on real and personal property. From this fund the ordinary expenses of the State Government, other than for school purposes, are met.

The subjoined statements show the receipts into and the disbursements from the General Fund for each of the two fiscal years:

RECEIPTS FOR THE FORTIETH FISCAL YEAR.

From property tax.....	\$2,831,302 87	
From property tax on possessory claim.....	7 50	
From property tax on railroads.....	125,403 69	
On account State loan to Calaveras County.....	4,064 61	
From Insurance Commissioner.....	26,847 30	
From Surveyor-General.....	22,334 00	
From Register State Land Office.....	4,143 00	
From Secretary of State.....	3,342 24	
From Clerk Supreme Court.....	8,592 08	
From Trustees Home Feeble-Minded Children.....	2,414 75	
From G. A. Johnson, Attorney-General, unexpended balance appropriation railway tax cases.....	107 45	
From G. A. Johnson, Attorney-General, attesting land patents.....	20 00	
From J. D. Young, State Printer, sales paper scraps, etc.	159 44	
From State Board of Examiners, return of money invested for relief of James Saultry.....	24,500 00	
From State Board of Forestry, overdraft.....	25 80	
From State Board of Horticulture, overdraft.....	25 83	
From Arthur Rodgers, unexpended balance Gov. Bartlett's funeral expenses.....	8 33	
From Governor Waterman, money received from United States Government on account of expenses, suppression Indian hostilities.....	11,723 64	
From P. Hersey, excess of mileage.....	4 00	
From William Fitzgerald, unexpended balance contingent expenses of Assembly.....	14 00	
From George W. Faylor, Sergeant-at-Arms of Senate, money returned.....	94 60	
Total.....		\$3,065,185 13
Balance on hand at close of thirty-ninth fiscal year.....		418,581 84
Total.....		\$3,483,766 97
<i>Disbursements.</i>		
Warrants drawn during fortieth fiscal year.....	\$3,151,954 03	
Balance on hand.....	331,812 94	
Total.....		\$3,483,766 97

RECEIPTS FOR FORTY-FIRST FISCAL YEAR.

From property tax.....	\$4,821,156 70	
From property tax on possessory claim.....	7 50	
From property tax on railroads.....	199,212 93	
On account of State loan to Calaveras County.....	4,186 92	
From Insurance Commissioner.....	29,628 77	
From Surveyor-General.....	7,290 50	
From Register State Land Office.....	3,698 50	
From Secretary of State.....	3,342 20	
From Clerk Supreme Court.....	9,572 72	
From Trustees Home for Feeble-Minded Children.....	2,063 55	
From Geo. A. Johnson, Attorney-General, unexpended balance United States Court cases.....	95 50	
From J. D. Young, State Printer, sales of scraps, etc.....	349 43	
From John P. Dunn, Controller, sales of pure wine labels.....	255 00	
From Trustees State Library, amount overdrawn on postage appropriation.....	10 09	
From M. D. Boruck, duplicate demand.....	5 30	
From canceled warrants.....	344 20	
Total.....		\$5,081,828 81
Balance on hand.....		331,812 94
Total.....		\$5,413,641 75
<i>Disbursements.</i>		
Warrants issued during forty-first fiscal year.....	\$3,276,283 30	
Transfer to Southern California Insane Hospital Fund.....	350,000 00	
Transfer to Revolving Jute Fund.....	60,000 00	
Balance on hand.....	1,727,358 45	
Total.....		\$5,413,641 75

As will be seen by reference to the table showing the condition of the various funds on page 11, the amount to the credit of the General Fund at the close of the forty-first fiscal year, June 30, 1890, was \$1,727,358 45. This large balance is accounted for in various ways, to wit: In forty-first fiscal year, appropriations as yet undrawn; in amounts chargeable to the forty-first fiscal year, but which will be drawn in the forty-second fiscal year; in receipts from other sources than property tax; in amounts involved in the tax levy bill, but which failed passage in appropriation bills. For these reasons, and after all demands properly chargeable to the General Fund shall have been paid, there will remain to its credit a surplus amounting to about \$400,000; but from this must be deducted the salaries of the Board of River Commissioners of \$14,000, provided for by appropriation bill, but not included in the tax levy bill, as well as the sum of \$150,000 appropriated to supply further jute manufacturing facilities at San Quentin State Prison, but not drawn against, thus leaving in round numbers an excess to the credit of that fund of about \$236,000, which the next Legislature can deduct from the amount necessary to be included in its tax levy bill.

GENERAL FUND DISCREPANCY.

Under the Act of the Legislature, approved March 10, 1885, providing for the payment of what is known as the drainage claims, it was provided that, after paying out on those claims the amount of money then remaining to the credit of the Drainage Funds, the residue should be paid out of the General Fund, and warrants were so paid by the State Treasurer, amounting to \$3,306 72. These warrants were not issued against that fund; and, consequently, they constituted no charge on the

books of this office against the General Fund. But the Treasurer, in compliance with the law, paid them out of the General Fund and on his books they were properly so charged. But, as will be seen, at the end of that month a discrepancy appeared between the books of the two offices to that amount, the books of this office showing \$3,306 72 more money to the credit of the General Fund than was shown by the books of the Treasurer, and they have so remained ever since. I therefore recommend such legislation as will permit the books of the Treasurer's office to be made to correspond with those of the Controller.

COMMON SCHOOL FUND.

The revenue for the support of common schools arises from property tax, poll tax, interest upon unpaid principal due from sales of lands granted by the General Government to the State for educational purposes, known as State school lands, from interest on bonds held in trust by the State for the support of common schools, and from the sale of Geological Survey reports. The money arising from all these sources is known as the State School Fund. It is apportioned to the several counties semi-annually, during the months of February and August, by the State Superintendent of Public Instruction, and is drawn upon Controller's warrants, issued on presentation of the Superintendent's drafts, in favor of the several County Treasurers.

The amount of money estimated by me as necessary to be appropriated for the support of common schools for the two fiscal years, as will be seen by reference to Statement No. 24, in the Appendix, is \$3,600,000, or \$1,800,000 per year. This is \$400,000 in excess of the estimates for the thirty-ninth and fortieth fiscal years. The receipts that will flow into this fund from the interest on bonds held in trust; from the interest on the 500,000-acre land grant; from interest on the 16th and 36th sections land grant; from the revenues saved to this fund out of the 12 per cent allowed for delinquencies and the cost of collecting taxes, and from all other sources, will increase largely the amount of money coming to the fund, over and above the sum named in the estimate. This will be seen by an examination of the figures for the forty-first fiscal year. For that year the tax levy for common school purposes was \$1,893,500; the amount actually collected from property tax was \$2,100,800 81, making an excess in collection over the tax levy of \$207,300 81. Besides this, \$352,927 70 was collected from poll tax; \$1,487 92 from interest on the 500,000-acre land grant; \$47,583 90 from interest on 16th and 36th sections land grant; and \$216,943 38 from interest on bonds held in trust—making the sum of \$826,243 71 over and above the amount contained in the tax levy for common school purposes—making an aggregate of \$2,719,743 71 for that fiscal year. The number of census children, as stated by the report of the Superintendent of Public Instruction for the previous year, was two hundred and seventy-five thousand three hundred and two, which, divided into the total amount of money subject to apportionment, gave to each census child the sum of \$10 63 for the year; which is \$3 63 more than the \$7 by law required to be raised annually.

For detailed exhibits showing the amount received from and paid to the several counties, see Appendix, Statements Nos. 8 and 9.

RECEIPTS FOR THE FORTIETH FISCAL YEAR.

Balance from thirty-ninth fiscal year.....		\$220,535 27
Amount apportioned in thirty-ninth fiscal year undrawn.....		53,605 65
Property tax.....	\$1,914,092 37	
Poll tax.....	340,572 84	
Interest on 500,000-acre grant.....	7,321 88	
Interest on 16th and 36th sections grant.....	74,950 97	
Interest on bonds held in trust.....	165,484 47	
Taxes on railways.....	79,566 48	
Sales Geological Survey Reports.....	24 50	
		2,582,013 51
Total.....		\$2,856,154 43
<i>Disbursements.</i>		
Amount apportioned to County Treasurers.....	\$2,531,880 00	
Amount apportioned in thirty-ninth fiscal year but drawn in fortieth fiscal year.....	53,605 65	
Restitution of interest, land sold not property of State.....	1,327 06	
Balance subject to next semi-annual apportionment.....	269,341 72	
		\$2,856,154 43

RECEIPTS FOR THE FORTY-FIRST FISCAL YEAR.

Balance from fortieth fiscal year.....		\$260,341 72
Amount apportioned in fortieth fiscal year undrawn.....		33,006 48
Property tax.....	\$2,022,646 09	
Poll tax.....	352,927 70	
Interest on 500,000-acre grant.....	1,487 92	
Interest on 16th and 36th sections grant.....	47,583 90	
Interest on bonds held in trust for School Fund.....	216,943 38	
Taxes on railways.....	78,154 72	
		2,719,743 71
Total.....		\$3,022,091 91
<i>Disbursements.</i>		
Amount apportioned to County Treasurers.....	\$2,629,134 10	
Amount apportioned in fortieth fiscal year, paid in forty-first.....	33,006 48	
Restitution of interest, land sold not property of State.....	1,229 10	
Costs annulment certificate of purchase.....	33 82	
Balance subject to next semi-annual apportionment.....	358,688 41	
		\$3,022,091 91

The interest on the bonds, reported in the foregoing statement, is the yield from securities held in trust for the State School Fund by the State Treasurer, consisting of bonds of the State of California, amounting to \$1,541,500, together with bonds of various counties of this State, aggregating \$1,726,850, the whole of which are described as follows, to wit:

CLASS OF BONDS.	Amount.	Total.
State Funded Debt Bonds of 1873—six per cent.....		\$1,541,500 00
Sacramento County Bonds—four and one half per cent.....	\$100,000 00	
Sacramento County Bonds—six per cent.....	32,100 00	
Sacramento County Bonds—eight per cent.....	145,000 00	
Sacramento County Bonds—four per cent.....	84,000 00	
Humboldt County Bonds—nine per cent.....	25,000 00	
Santa Clara County Bonds—four per cent.....	86,000 00	
Santa Clara County Bonds—five per cent.....	12,500 00	
Fresno County Bonds—six per cent.....	51,000 00	
Marin County Bonds—five per cent.....	72,000 00	
Inyo County Bonds—five per cent.....	50,500 00	
Yolo County Bonds—five per cent.....	43,000 00	
Tehama County Bonds—five per cent.....	51,000 00	
Napa County Bonds—five per cent.....	27,000 00	
San Luis Obispo County Bonds—five per cent.....	16,000 00	
San Luis Obispo County Bonds—eight per cent.....	40,000 00	
Mendocino County Bonds—four per cent.....	68,000 00	
Santa Barbara County Bonds—five per cent.....	12,000 00	
Los Angeles County Bonds—four and one half per cent.....	255,000 00	
Lake County Bonds—five per cent.....	47,800 00	
San Diego County Bonds—five per cent.....	191,800 00	
San Diego County Bonds—four and one half per cent.....	34,000 00	
Monterey County Bonds—five per cent.....	90,000 00	
Santa Cruz County Bonds—four and one half per cent.....	149,000 00	
Trinity County Bonds—five per cent.....	7,150 00	
Merced County Bonds—four and one half per cent.....	37,000 00	
Total securities held in trust for the support of common schools.....		1,726,850 00
		\$3,268,350 00

Since the issuance of my last biennial report, State bonds held in trust for the support of common schools have been redeemed to the amount of \$5,000; also, county bonds aggregating \$156,500—making a total of \$161,500 redeemed. During the same time county bonds were purchased, or exchanged, to the amount of \$570,950. The increase in bonds held in trust for the support of common schools is, therefore, \$409,450.

This fund, as already stated, is fed by interest on bonds held in trust; by poll taxes; by interest on sales from the five hundred thousand-acre land grant; interest on sales from the sixteenth and thirty-sixth sections land grant; by sales of Geological Survey reports, and by a percentage on State taxes, fixed from year to year by the State Board of Equalization—though the great bulk of it comes from the percentage on State taxes.

The appropriation made by the Legislature for the support of common schools for the fortieth fiscal year amounted to \$1,800,000, and for the forty-first fiscal year to \$1,893,500. Yet, whilst the tax levy for the fortieth fiscal year was but \$1,800,000, the actual amount raised from property tax was \$1,993,658 85, and from all other sources \$588,354 66, making a total receipt of \$2,582,013 51. For the forty-first fiscal year the levy was \$1,893,500; the receipts from property tax amounted to \$2,100,800 81; from all other sources, \$618,942 90, making a total for the year of \$2,719,743 71.

The excess of receipts from property tax over the amounts levied, as shown by each year's transaction, is accounted for mainly by receipts from delinquent taxes of previous years, and from the difference between the actual delinquency and cost of collection, and the amount therefor allowed by law, which is 12 per cent. The school moneys pay but a

small proportion of the cost of collection, being chargeable only with a proportion of the commissions allowed to Assessors for collecting personal property taxes, commissions allowed Auditors, and the mileage of County Treasurers.

INTEREST AND SINKING FUND.

This fund is intended to meet the principal and interest due on the bonds issued by the State. The last Legislature directed a levy which would bring to this fund \$200,000 per year for the forty-first and forty-second fiscal years. The only bonds remaining unpaid are the Funded Debt Bonds of 1873, amounting to \$2,637,000, \$61,000 having been called in and redeemed during the last two fiscal years. The following is a statement of the

RECEIPTS.

Balance from thirty-ninth fiscal year.....	\$243,505 49
Receipts during fortieth fiscal year.....	204,738 15
Receipts during forty-first fiscal year.....	205,464 03
Total.....	<u>\$653,707 67</u>

DISBURSEMENTS.

Warrants issued during fortieth fiscal year.....	\$291,820 00
Warrants issued during forty-first fiscal year.....	167,760 83
Balance.....	194,126 84
Total.....	<u>\$653,707 67</u>

The amount necessary to be raised to meet the interest on the outstanding State bonds for the forty-third and forty-fourth fiscal years is \$303,420. \$108,500 of the bonds of 1873 have been called in and interest ceased October 2, 1890, leaving \$2,528,500 outstanding and bearing interest.

STATE SCHOOL LAND FUND.

Receipts—Fortieth Fiscal Year.

Balance from thirty-ninth fiscal year.....	\$115,766 65
Receipts during the fortieth fiscal year.....	275,796 07
Total.....	<u>\$391,562 72</u>

Disbursements.

Warrants issued during the fortieth fiscal year.....	\$130,978 07
Balance.....	251,584 65
Total.....	<u>\$391,562 72</u>

Receipts—Forty-first Fiscal Year.

Balance from fortieth fiscal year.....	\$251,584 65
Receipts during the forty-first fiscal year.....	255,602 68
Total.....	<u>\$507,187 33</u>

Disbursements.

Warrants issued during forty-first fiscal year.....	\$459,141 06
Balance.....	48,046 27
Total.....	<u>\$507,187 33</u>

Bonds amounting to \$409,450 in excess of the amount held at the close of the thirty-ninth fiscal year, were purchased with the moneys of this fund, and are now held in trust by the Treasurer for the support of common schools, as shown under the head of State School Fund.

UNIVERSITY FUND.

The amount of bonds on deposit in the State Treasury under the Act approved March 19, 1878, creating the Consolidated Perpetual Endowment Fund of the University of California, is \$1,063,500, as follows:

State—		
State Funded Debt Bonds of 1873, 6 per cent.....	\$817,500 00	\$817,500 00
County—		
Tehama, 5 per cent.....	\$29,500 00	240,000 00
San Francisco Park Improvement of 1873, 6 per cent.....	50,000 00	
San Francisco Park and Avenue Improvement Bonds of 1874.....	1,000 00	
San Francisco School, 6 per cent.....	30,000 00	
San Francisco Montgomery Avenue, 6 per cent.....	22,000 00	
Plumas, 6 per cent.....	7,000 00	
Marin, 7 per cent.....	50,000 00	
Kern, 7 per cent.....	15,000 00	
Santa Clara, 7 per cent.....	3,000 00	
Fresno, 7 per cent.....	12,500 00	
San Francisco, Dupont Street, 7 per cent.....	20,000 00	
		6,000 00
Town—		
Town of Alameda, 6 per cent.....	\$6,000 00	
Total.....		\$1,063,500 00

Since my last report, county bonds to the amount of \$9,500 have been redeemed and \$67,000 withdrawn by the Board of Regents of the University, making a deduction of \$76,500. Meantime, the Regents have deposited with the Treasurer \$20,000 in Dupont Street, San Francisco, Bonds, leaving a net deduction of \$56,500.

Of the above State bonds held in trust, \$66,500 have been called for redemption, interest ceasing October second of the present year.

NOTE.—Under an Act of the Legislature, approved March 7, 1883, the control of this fund is practically taken out of the hands of the Controller, as, under that law, the State Treasurer may pay out the money belonging to that fund without the agency of a Controller's warrant. This renders it impossible for the Controller to have official knowledge and supervision of that branch of the State's finances. The wisdom of this legislation is open to grave question.

STATE UNIVERSITY FUND.

This fund is fed from the proceeds of the 1 per cent tax upon all the property in the State. The following tables show its condition for the fiscal years:

Receipts—Fortieth Fiscal Year.

Balance on hand from thirty-ninth fiscal year.....	\$5,581 45
Receipts during the fortieth fiscal year.....	101,191 76
Total.....	<u>\$106,773 21</u>

Disbursements.

Warrants issued during fortieth fiscal year.....	\$98,348 38
Balance at close of fiscal year.....	8,424 83
Total.....	<u>\$106,773 21</u>

Receipts—Forty-first Fiscal Year.

Balance on hand at close of fortieth fiscal year.....	\$8,424 83
Receipts during the forty-first fiscal year	102,471 50
Total	<u>\$110,896 33</u>

Disbursements.

Warrants issued during forty-first fiscal year.....	\$101,205 89
Balance at close of fiscal year.....	9,690 44
Total	<u>\$110,896 33</u>

GRAMMAR SCHOOL COURSE FUND.

This fund was created by an Act of the Legislature, of March 15, 1889, but no levy of taxes for its benefit was provided for under it until the forty-first fiscal year:

The receipts into this fund during the forty-first fiscal year were.....	\$74,608 59
Warrants issued.....	6,582 00
Leaving a balance of.....	<u>\$68,026 59</u>

Of the fifty-three counties in the State, but twenty-two have availed themselves of the provisions of this law, and but small portions of those. And of the two hundred and eighty thousand eight hundred and eighty-two census children in the State, but three thousand five hundred and fifty-eight are reported as attending Grammar Schools. The law provides that a tax shall be levied upon all the taxable property of the State, sufficient to raise \$3 for each child enrolled as attending the Grammar Course Schools, the amount so far drawn being but \$6,582 of the \$74,608 59 collected. This shows that the law is unpopular. Its results indicate that it is unequal in its operations; that it does injustice to the taxpayers of the State who have not availed themselves of its provisions; it seems to me that sound wisdom requires its repeal, and the money to its credit be transferred to the Common School Fund and apportioned to the support of common schools.

STATE LIBRARY FUND.

Receipts—Fortieth Fiscal Year.

Balance on hand at close of thirty-ninth fiscal year.....	\$27,831 46
Receipts during the fortieth fiscal year	20,166 95
Total	<u>\$47,998 41</u>

Disbursements.

Warrants issued during fortieth fiscal year.....	\$13,074 59
Balance at close of fiscal year	34,923 82
Total	<u>\$47,998 41</u>

Receipts—Forty-first Fiscal Year.

Balance on hand at close of fortieth fiscal year.....	\$34,923 82
Receipts during forty-first fiscal year.....	19,362 55
Total	<u>\$54,286 37</u>

Disbursements.

Warrants issued during forty-first fiscal year.....	\$44,779 30
Balance at close of fiscal year	9,507 07
Total	<u>\$54,286 37</u>

The Trustees of the State Library are not required to present itemized bills for expenditures before warrants are issued, as other Boards are, and their demands are likewise not required to pass the State Board of Examiners before reaching the office of the Controller. This system should be changed so as to conform with that adopted with other departments of the State Government. Appropriations should be made by the Legislature for all needs of the library, as is done in other departments; warrants based upon vouchers should be drawn against these appropriations in the same manner as those of other departments, and the fees from the Secretary of State's office that now go to the Library Fund should be paid into the General Fund.

STATE DRAINAGE CONSTRUCTION FUND, AND CONSTRUCTION FUND OF DRAINAGE DISTRICT NO. 1.

These funds were created by the Act of April 23, 1880. Both Acts were finally declared unconstitutional. Still, taxes levied under that law attach to all property delinquent for that year. As will be seen by reference to Statement 7 of the Appendix, there remains to the credit of the former fund the sum of \$8,301 54, and to the latter \$396 41. By subsequent statute all claims against these funds are payable from the General Fund, and not from either of these two funds. Hence, the money in them and to come into them is practically useless, and I recommend that the money now to their credit, as well as all that shall hereafter be paid to their credit, be transferred to the General Fund.

NEW FUNDS.

The last Legislature created three new funds, one to be known as the Special Mendocino Insane Asylum Fund, and another as the Southern California Insane Hospital Fund. The appropriations already made were probably intended only to cover the purchase of a site and the construction of the necessary buildings; and justice to all other public institutions would seem to require that, when these objects shall have been accomplished, the laws shall be so amended as to abolish these funds, and any further appropriations made to these institutions be made from the General Fund.

The third is the School Land Deposit Fund, providing for a payment of \$25 to be made with each application to purchase land from the State, instead of the \$5 payment heretofore required. Twenty dollars of the \$25 goes to the School Land Deposit Fund as evidence of good faith in the purchaser, and the remaining \$5 is paid to the General Fund as fees.

STATE DEBT.

At the beginning of the fortieth fiscal year, the State debt amounted to \$2,703,500. Since that time Funded Debt Bonds of 1873, amounting to \$61,000, and also \$500 of Funded Debt Bonds of 1857, have been redeemed, leaving the State debt on July 1, 1890, at \$2,642,000, classified as follows:

SERIES.	Amount.	Rate of Interest.
State Funded Debt Bonds of 1857.....	\$4,500 00	} Interest ceased. 6 per cent.
State Funded Debt Bonds of 1860.....	500 00	
State Funded Debt Bonds of 1873.....	2,637,000 00	
Total.....	\$2,642,000 00	

The funded debt is as follows:

Bonds in private hands.....	\$283,000 00
Bonds held in trust for the State School Fund.....	1,541,500 00
Bonds held in trust for the University Fund.....	817,500 00
Total.....	\$2,642,000 00

The interest-bearing debt consists of:

Bonds held in private hands.....	\$278,000 00
Bonds held in trust for the State School Fund.....	1,541,500 00
Bonds held in trust for the University Fund.....	817,500 00
Total.....	\$2,637,000 00

The bonds held in private hands, bearing interest at this date, are:

SERIES.	Amount.	Rate of Interest.
State Funded Debt Bonds of 1873.....	\$278,000 00	6 per cent.

The Funded Debt Bonds of 1857 were issued under the Act of April 28, 1857. The amount of bonds issued was \$3,900,000, all of which, except bonds amounting to \$4,500, have been redeemed or refunded, and upon these interest has ceased.

The bonds of 1860, amounting to \$198,500, were issued under the Act of April 30, 1860. These bonds have all been redeemed or refunded, excepting a bond amounting to \$500, called in July 31, 1875, but which has not yet been surrendered, although interest ceased from date of notice.

Of the \$2,642,000 outstanding bonds of the State, \$2,359,000 are held by the State for the benefit of the School and University Funds, leaving but \$283,000 in private hands. Of this amount, \$5,000 have been called in, there being money in the Treasury to pay them.

The State Funded Debt Bonds of 1873, falling due July 1, 1893, amount to \$2,637,000. Of this amount, the sum of \$108,500 has been called in, and interest on them ceased October 2, 1890, thus virtually leaving but \$2,528,500 outstanding.

As will be seen, therefore, the whole amount of outstanding bonds will fall due in 1893. They must, of course, be refunded or paid. The money has not been provided for their payment. Hence, it will be the duty of the Legislature to provide for this emergency, and prompt action will be necessary. I have, in previous reports, called especial attention to this matter, and now that the day of payment is upon us, prompt action is necessary, if the obligations of the State are to be met.

RAILROAD TAXES.

By reference to my last biennial report it will be seen that the delinquency of the Central and Southern Pacific Companies and their branches for the years 1883 to 1887, inclusive, amounted to \$2,547,700 61. No part of this indebtedness has since been paid.

All of the taxes levied upon these companies and their branches for the years 1888 and 1889 were paid when due. Therefore, the indebtedness of these companies is the same as shown in my last report.

The controversy as to the constitutionality of our system of taxation of railroads which, as is well known, has existed for years, is as yet unsettled, owing to the successful efforts of the attorneys of the railroads in preventing the test cases before the United States Supreme Court from being heard upon their merits or at all. During the session of the Legislature of 1889, the Judiciary Committee of the Assembly, under a resolution of that body, made an investigation of the manner in which certain railroad tax cases had been conducted on behalf of the State.

During one of the sessions of this committee, Mr. Creed Haymond, representing the railroad companies, agreed that the question of the constitutionality of our method of assessment of railways should be presented to the United States Supreme Court for final determination. In pursuance of this agreement, the case of the State against the San Pablo and Tulare Railroad Company was made a test case and appealed to the United States Supreme Court, being placed on the calendar of that Court for hearing at the October term, 1889. At the same time certain suits against these companies for the recovery of the delinquent taxes of 1886 were pending in our State Supreme Court. Judgments adversely to the State were rendered in these cases on the Saturday preceding the Monday on which the agreed test case was set for argument in the United States Supreme Court.

The attention of the Court being directed to this decision of our Supreme Court, the agreed test case was continued for the term, and a hearing delayed and a decision postponed, if not prevented. In the present condition of things, no other case presenting these issues can be taken to the Supreme Court of the United States, and unless a decision is obtained in this agreed test case, this controversy will remain open and undetermined for years.

The actions of the attorneys of these railroad companies throughout the whole course of this litigation, positively demonstrates that it is not their desire, or that of their employers, that the Supreme Court of the United States shall be permitted to pass upon and finally determine the legal questions involved in these suits. Conscious of the weakness of their position, they have sought by every means to prevent a final decision.

Is it not strange that the moral force of the great State of California is insufficient to secure from the Supreme Court of the nation a hearing in a just complaint against a corporation created by her own laws?

The Supreme Court of the State having declared unconstitutional certain of the provisions of the Act of March 9, 1883, relating to the assessment and collection of taxes on railroads, I would urge that the Legislature so amend said Act as to meet the objections of the Court.

I desire to renew the recommendations made in my last biennial report, as follows:

I recommend that the Legislature pass an Act requiring the State Board of Equalization to reassess railroads delinquent for taxes for the years since 1880, and that the County Auditors and Treasurers be required, on the settlement with said railroad companies, under this reassessment, to credit them with any partial payments already made for those years.

I earnestly and urgently recommend that the law for the taxation of railroads be so amended as that the same penalty for delinquency of other property shall attach to delinquent railroads, and that that class of property be sold for delinquent taxes as all other classes of property are sold, and that like penalties of redemption be provided. The heavy hand of the law is laid upon the house and home of the farmer, and the owner of city and town homesteads, for delinquency, and the property is sold at tax sale; and is there any good reason why railroad property should be exempted from the severe penalties imposed upon other classes of property for delinquency? Is it of loftier or holier character than the homes and firesides of families? Let the certainty be established that legal clouds will fall upon the title to this class of property through sale on account of delinquency, and that redemption profits such as accrue to purchasers of other kinds of property will ensue, and railroad delinquency and obstinacy will end together.

I also cheerfully recommend appropriations sufficient properly to compensate Hon. A. L. Rhoads and Hon. D. M. Delmas for their valuable services in prosecuting these railroad tax cases in the Courts.

STATE ENGINEER'S DEPARTMENT.

This department was first organized in May, 1878. The amount of money expended through its management, from that time until the end of the thirty-ninth fiscal year, ending June 30, 1888, is \$259,023 70. Of this sum the State Engineer has received as salary the sum of \$58,500. It was understood that the work of this office would be complete, and the expenses cease in 1884, six years ago; but the process of ending it has been going on and on ever since. No end as yet has been reached. The State Mineralogist is ex officio State Engineer, and draws a salary of \$250 per month for each place. The last Legislature made an appropriation which was deemed sufficient to complete the work and end the affairs of the office. Whether this has been accomplished or not I am not advised; but as the office at best is a useless one, I am of the opinion that it should be abolished.

PURE WINE LABELS.

The Legislature of 1889 provided an appropriation for the printing of California Pure Wine labels, and, consequently, all moneys realized from sales are now turned into the State Treasury. Prior to the appropriation of 1889, it was the custom to remit money direct to the printers and lithographers as rapidly as such money was received at this office.

The names of purchasers, with number of labels on hand, number purchased during each term, and number on hand at end of each term (since last biennial report), may be found in Statement No. 22, in Appendix. The total amount realized from sales of pure wine labels, from the inception of the Act to date, is \$1,763 22; amount realized

since last biennial report to June 30, 1890, forty-first and forty-second fiscal years, \$633 30.

The following table is a summary of the number of wine labels actually used from the inception of the Act to date:

HALF YEAR ENDING—	Bottles.	Packages.	Total.
December 31, 1887.....	162,850	21,374	184,224
June 30, 1888.....	76,042	9,822	85,864
December 31, 1888.....	48,421	6,019	54,440
June 30, 1889.....	29,897	2,068	31,965
December 31, 1889.....	101,254	1,186	102,440
June 30, 1890.....	23,595	531	24,126
Totals	442,059	40,990	483,089

SAN QUENTIN STATE PRISON.

I estimate the amount necessary to be appropriated for the support of San Quentin State Prison for the forty-third and forty-fourth fiscal years at \$116,000. The basis of this estimate is the official report of the Prison Directors, made to the Governor, for the fortieth fiscal year. On page 24 of that report the maintenance cost of the prison is given in Table No. 4, as follows:

Total expense of the year.....		\$216,928 26
Net earnings of manufacturing departments.....	\$98,674 10	
Support of United States prisoners.....	3,617 00	
Rent of State houses.....	551 45	
Profit on sale of beef in Commissary Department.....	256 04	
		103,098 59
Net expense of the prison.....		\$113,829 67

This amount, multiplied by 2, gives the amount necessary to maintain the prison for the two years.....	\$227,659 34
But from this amount must be deducted the amount in the Prison Fund July 1, 1890, subject to draft for prison expenses, which was.....	111,754 59
Leaving a balance necessary to be appropriated of.....	\$115,904 75

The balance of the \$111,754 59 to the credit of the Prison Fund is constantly augmenting, and thus lessening the amount necessary to be appropriated for the maintenance of the prison.

DISPARITY IN OFFICIAL SALARIES.

The irregularity in the amount of salaries paid to certain State officers as compared with others, cannot fail to attract the notice of the general public, considering the difference in the labor performed and the responsibility attached to the different positions. For instance, the State Mineralogist and ex officio State Engineer receives \$6,000 per year; the Bank Commissioners, \$3,600; the Private Secretary to the Governor, \$4,000; the State Board of Equalization, \$3,000; Railroad Commissioners, \$4,000; Wardens of the State Prisons, \$3,000, house rent free and household expenses free; and others of like character that might be mentioned; whilst the Secretary of State, the State Treasurer, the Attorney-General, the Surveyor-General, the Clerk of the Supreme Court, the

Superintendent of Public Instruction, and the Controller, all of whose responsibilities are great and whose labors never cease, are paid but \$3,000 a year.

SALARIES OF SUPERIOR JUDGES.

The last Legislature increased the salaries of Judges of the Superior Court from \$3,000 to \$4,000 per year in the following named counties, to wit: Santa Cruz, San Mateo, Colusa, Monterey, Santa Barbara, San Diego, Marin, Mendocino, Tehama, San Bernardino, Kern, Placer, Humboldt, Tulare, Fresno, and Solano. And the following salaries were increased from \$3,000 to \$3,500 per year: Amador, Calaveras, Stanislaus, and El Dorado. In Alpine County, the salary is reduced from \$3,000 to \$2,000 per year. These differences for the two fiscal years for which the next Legislature will be called upon to make appropriations, amount to \$16,000, and will explain the increase in the estimates in this report as against those in my last report.

COUNTY TREASURERS' STATEMENTS.

Experience has demonstrated that the law governing the time for settlement by County Treasurers with the State Treasurer should be amended so as to require that they shall include in their settlements all State moneys received by them up to and including the first Monday of the month in which they are required to make settlement; and that the law relating to the duties of County Auditors be amended so as to correspond with the amendment relating to Treasurers.

COST OF COLLECTING STATE REVENUE.

The commissions by law authorized to be paid to county officers for collecting the State's portion of taxes should, in my judgment, be abolished, and mileage only should be allowed to the County Treasurers. The present system is cumbersome, and consists simply of paying money out of one pocket and receiving it into another.

BASIS OF ESTIMATES OF EXPENDITURES.

In making the estimates of expenditures embodied in this report, I have followed the mandates of the law as it exists, but in doing so, I do not desire to be regarded as acquiescing either in the wisdom or necessity of many of the laws. Instead, there are expenses, aggregating large sums, which, in my judgment, are useless for any good purpose whatever, and which ought not to exist as an expense to the State.

STATE PRINTING OFFICE.

The sum of \$200,000 I have estimated for the support of the State Printing Office, for the two fiscal years, is deemed insufficient by the Superintendent of State Printing, because of the very heavy demands made upon him by many of the departments, in the way of printing, binding, and stationery. There is no question but that some Board or official should be clothed with the discretion of fixing the maximum amount of cost that shall be incurred by each department, and have im-

posed upon him the duty of enforcing compliance therewith. Under such circumstances, I have no doubt that the amount estimated would be ample for all needs of the office.

DEFALCATIONS.

In my last biennial report attention was called to certain official defalcations, and comments deemed warranted were made touching them. Among those parties was T. C. Van Ness, ex-Commissioner of Immigration. Since that time the sum of \$3,985 34 has been recovered from his bondsmen.

The Supreme Court sustained the position taken by the lower Court in the case against D. M. Burns, ex-Secretary of State, in giving judgment against Mr. Burns' bondsmen for only \$1,492 79.

The judgment for \$10,149 against the bondsmen of J. W. McCarthy, ex-Clerk of the Supreme Court, is as yet undecided, being on appeal to the Supreme Court.

Judgment was obtained against the bondsmen of F. W. Gross, ex-Clerk of the Supreme Court, for the full amount sued for, \$3,650 79, but none of the money has so far been recovered. It, too, is on appeal to the Supreme Court.

A most remarkable state of affairs seems to hedge around the cases against the ex-Harbor Commissioners and their bondsmen. Although seven years have elapsed since these actions were instituted, to-day they remain undetermined. The amount involved is \$91,678 95, in addition to the 25 per cent penalty prescribed by law. It is sincerely to be hoped that the time is not far off when this money will be paid into the Treasury.

In this connection, I desire publicly to express my appreciation of the faithful, efficient, and intelligent services rendered by Messrs. Langhorne & Miller, attorneys at law, in the prosecution of the cases in which they were engaged by this office, with the consent of the Attorney-General.

FINANCIAL CONDITION OF COUNTIES.

Section 4083 of the Political Code requires that the Controller shall include in his biennial report a digest and synopsis, in tabular form, of the financial condition of the several counties in the State.

In addition to this statement will be found an exhibit of the financial condition of each county, prepared from reports from the various County Auditors, closing June 30, 1890. See first page of exhibits, showing the assessed value of property and the indebtedness of the counties of the State.

CONCLUSION.

In closing my report, I desire to express my appreciation of the ability and fidelity of the employés of this office.

Respectfully yours,

JOHN P. DUNN,
Controller.

DETAILED STATEMENT

Of the manner in which the Appropriations for Postage, Expressage, and Telegraphing in the office of Controller of State, were Expended for the Fortieth Fiscal Year, ending June 30, 1889.

July 17, 1888—Telephone	\$6 50
July 20, 1888—Post Office box rent	3 00
August 9, 1888—Telephone, \$5 50; telegraphing, \$1 34	6 84
August 22, 1888—Postage stamps	22 00
September 14, 1888—Telegraphing, \$3 80; telephone, \$5 75	9 55
October 9, 1888—Telephone	6 00
October 11, 1888—Telegraphing, 90 cents; Post Office box rent, \$3	3 90
November 9, 1888—Telegraphing, \$5 52; telephone \$6 75	12 27
December 5, 1888—Telegraphing, 65 cents; telephone, \$5 50; stamps, \$30	36 15
January 7, 1889—Postage stamps, \$30; Post Office box rent, \$3	33 00
January 16, 1889—Expressage	7 28
February 8, 1889—Telegraphing, \$14 30; telephone, \$10; expressage, \$28 72	53 02
April 13, 1889—Telegraphing, \$18 03; telephone, \$13 25; postage, \$30; Post Office box rent, \$3	64 28
May 29, 1889—Telegraphing, \$10 61; telephone, \$5; postage stamps, \$40	55 61
June 12, 1889—Telegraphing, \$6 47; telephone, \$5; postage stamps, \$20	31 47
Total	<u>\$350 87</u>

The following bills accrued during the thirty-ninth fiscal year, and were paid in the fortieth fiscal year:

July 17, 1888—Telegraphing, \$1 32; expressage, \$20 45	<u>\$21 77</u>
---------------------------------------------------------------	----------------

For Forty-first Fiscal Year.

July 12, 1889—Post Office box rent	\$3 00
August 7, 1889—Telegraphing, \$8 87; telephone, \$5	13 87
September 6, 1889—Telegraphing, \$6 27; telephone, \$5 75	12 02
November 12, 1889—Telegraphing, \$27 57; Post Office box rent, \$3; expressage, \$0 50; postage stamps, \$20	51 07
November 22, 1889—Telephone	10 25
December 19, 1889—Telegraphing, \$12 35; telephone, \$5; expressage, \$2 40	19 75
January 2, 1890—Postage stamps	65 00
January 7, 1890—Telegraphing, \$15 27; telephone, \$5; Post Office box rent, \$3	23 27
January 27, 1890—Expressage	26 25
March 26, 1890—Telegraphing, \$29 20; telephone, \$10	39 20
April 7, 1890—Telegraphing, \$50 16; telephone, \$5 50; postage stamps, \$20; Post Office box rent, \$3; expressage, \$0 30	78 96
May 13, 1890—Telegraphing, \$6 36; telephone, \$5	11 36
June 6, 1890—Telegraphing, \$4 26; telephone, \$5; postage stamps, \$10	19 26
Total	<u>\$373 26</u>

The following bills accrued during the fortieth fiscal year, and were paid in the forty-first fiscal year:

July 12, 1889—Telegraphing, \$10 28; telephone, \$5	\$15 28
August 7, 1889—Expressage	21 00
Total	<u>\$36 28</u>

I, John P. Dunn, Controller of State, do solemnly swear that the foregoing is a true and correct statement in detail of the manner in which the appropriations for this department were expended, vouchers for all of which are now on file in this office.

JOHN P. DUNN.

Subscribed and sworn to before me this twenty-sixth day of November, 1890.

H. B. DAVIDSON,
Deputy Secretary of State.

DETAILED STATEMENT

Of the manner in which the Appropriations for Traveling and Contingent Expenses in the office of Controller of State were Expended during the Fortieth Fiscal Year, ending June 30, 1889.

July 17, 1888—Map.....	\$1 25
August 9, 1888—State Gazetteer, \$5; keys, \$1 50	6 50
October 19, 1888—Traveling expenses	112 50
November 22, 1888—Traveling expenses	17 00
December 18, 1888—Washing towels	5 00
January 8, 1889—Traveling expenses	223 25
February 8, 1889—Rubber stamps	21 50
February 8, 1889—Ice	17 50
March 25, 1889—Traveling expenses, \$86 20; transcribing, \$7	93 20
June 1, 1889—Document files	22 50
June 25, 1889—Traveling expenses	16 05
June 30, 1889—Ice	19 55
Total	<u>\$555 80</u>

The following bills accrued during the thirty-ninth fiscal year, and were paid in the fortieth fiscal year:

July 17, 1888—Ice, \$5 50; rubber stamps, \$26 75	\$32 25
December 18, 1888—Washing towels	6 00
	<u>\$38 25</u>

For Forty-first Fiscal Year.

August 7, 1889—Rubber stamps.....	\$13 25
September 3, 1889—Traveling expenses.....	26 00
September 20, 1889—Traveling expenses.....	14 00
September 26, 1889—Statistician, 1889.....	4 00
November 9, 1889—Traveling expenses.....	59 00
November 12, 1889—Rubber stamps, \$5 25; whetstone, \$1.....	6 25
November 12, 1889—Traveling expenses.....	28 00
November 22, 1889—Traveling expenses.....	28 00
December 3, 1889—Traveling expenses.....	23 00
December 6, 1889—Washing towels.....	6 00
December 6, 1889—Traveling expenses.....	11 00
January 25, 1890—Ice.....	23 70
June 6, 1890—Statistician, 1890.....	4 00
Total	<u>\$246 20</u>

The following bill accrued during the fortieth fiscal year, and was paid in the forty-first fiscal year:

May 13, 1890—Washing towels.....	<u>\$5 00</u>
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I, John P. Dunn, Controller of State, do solemnly swear that the foregoing is a true and correct statement in detail of the manner in which the appropriations for this department were expended, vouchers for all of which are now on file in this office.

JOHN P. DUNN.

Subscribed and sworn to before me this twenty-sixth day of November, 1890.

H. B. DAVIDSON,
Deputy Secretary of State.

APPENDIX.

STATEMENT NO. 1.

RECEIPTS FOR THE FORTIETH FISCAL YEAR.

Statement of the Receipts into the State Treasury for the Fortieth Fiscal Year, ending June 30, 1889.

COUNTIES.	PROPERTY TAX.					Poll Tax.	State School Lands, luth and 35th Sections—Principal.
	General Fund.	School Fund.	Interest and Sinking Fund.	State University Fund.	State Drainage Construction Fund.	Construction Fund Drainage District No. 1.	
Alameda.....	\$174,272 96	\$117,872 86	\$12,005 09	\$5,995 06	-----	\$15,760 70	-----
Alpine.....	553 82	406 86	19 09	38 19	-----	195 50	\$908 68
Anador.....	10,431 13	7,361 10	720 23	359 22	-----	2,123 30	1,215 20
Butte.....	51,234 11	35,084 06	3,533 47	1,766 61	-----	7,122 50	2,168 95
Calaveras.....	10,397 66	7,318 55	719 52	357 45	-----	2,508 80	2,508 80
Colusa.....	64,769 69	43,244 03	4,471 29	2,232 12	\$0 46	5,960 60	5,213 60
Contra Costa.....	38,650 52	25,867 50	2,625 37	1,293 47	65	4,172 65	18 63
Del Norte.....	4,817 61	3,470 30	350 02	160 73	-----	765 00	4,643 48
El Dorado.....	8,894 01	6,390 50	611 45	305 61	-----	3,238 40	2,650 77
Fresno.....	87,672 07	59,733 56	6,072 29	3,014 30	4 24	7,380 55	12,223 52
Humboldt.....	47,013 21	31,964 27	3,231 11	1,607 34	31	7,772 85	5,921 04
Inyo.....	3,298 02	2,349 83	232 75	112 13	-----	1,345 90	1,176 00
Kern.....	22,976 34	15,956 20	1,584 56	792 28	-----	2,384 95	19,410 62
Lake.....	9,215 01	6,508 45	642 00	315 56	14	1,736 85	2,250 44
Lassen.....	7,157 10	4,941 88	492 25	237 24	-----	1,904 90	16,610 86
Los Angeles.....	260,150 72	175,915 45	17,942 95	8,963 82	2 63	32,421 70	3,436 15
Marin.....	27,825 97	19,302 83	1,919 03	359 51	-----	3,444 20	-----
Mariposa.....	4,600 33	3,294 69	317 28	158 37	-----	1,523 15	2,953 52
Mendocino.....	30,056 16	20,563 64	2,068 73	1,024 08	-----	7,559 90	10,346 05
Merced.....	36,850 34	25,351 17	2,542 28	1,270 52	-----	2,989 50	2,587 20
Modoc.....	7,748 14	5,524 42	543 31	264 46	-----	1,770 10	4,850 19
Mono.....	2,214 84	1,594 98	152 61	76 24	-----	717 40	698 04
Monterey.....	36,283 20	25,236 23	2,503 10	1,250 84	-----	5,489 30	2,818 39
Napa.....	36,132 92	24,875 45	2,491 98	1,245 93	-----	5,965 60	689 04
Nevada.....	14,931 27	10,078 92	1,025 55	510 04	-----	4,969 10	55 87
Placer.....	20,105 79	13,876 29	1,388 84	692 05	-----	4,941 19	1,411 20
Plumas.....	5,479 59	3,878 81	377 88	188 98	-----	1,882 75	3,642 08
Sacramento.....	88,963 89	59,747 00	6,172 11	3,057 34	25 88	14,436 05	24 50
San Benito.....	15,617 94	10,861 74	1,072 94	534 72	-----	1,915 90	1,331 88
San Bernardino.....	56,628 34	38,794 92	3,912 12	1,949 12	2 15	6,929 30	6,872 11

San Diego.....	107,282 57	70,222 36	7,309 75	3,585 89	56	19,847 45	24,720 82
San Francisco.....	737,864 57	493,197 86	51,732 00	24,967 85	4 31	71,748 40	---
San Joaquin.....	98,774 20	67,070 95	6,810 63	3,396 95	---	10,316 60	627 20
San Luis Obispo.....	37,031 10	25,485 78	2,555 66	1,276 27	10	5,671 30	4,576 36
San Mateo.....	35,050 74	24,181 68	2,417 68	1,208 53	---	2,003 75	411 60
Santa Barbara.....	51,761 23	35,472 11	3,572 63	1,783 43	36	3,836 05	2,672 17
Santa Clara.....	141,207 97	93,784 86	9,738 48	4,869 24	---	14,001 35	945 51
Santa Cruz.....	25,821 40	17,901 81	1,781 11	890 30	07	3,787 60	---
Shasta.....	12,196 93	8,650 62	846 90	418 86	58	2,832 10	10,951 10
Sierra.....	4,203 51	2,975 73	290 77	144 69	---	2,295 00	764 78
Siskiyou.....	12,864 75	8,955 76	888 18	443 43	---	3,962 70	11,603 20
Solano.....	51,368 40	31,870 63	3,538 06	1,766 63	12	4,586 60	98 00
Sonoma.....	78,466 65	52,819 94	5,414 80	2,704 75	78	7,774 70	449 87
Stanislaus.....	38,980 69	26,855 53	2,690 62	1,343 44	40	3,118 60	333 20
Sutter.....	25,195 17	17,533 24	1,738 81	868 44	35	649 40	862 40
Tehama.....	28,193 16	19,500 80	1,944 34	972 16	---	4,668 00	5,147 85
Trinity.....	2,787 48	1,990 24	193 05	95 88	---	1,242 70	1,715 00
Tulare.....	60,266 14	41,213 51	4,172 00	2,073 36	34	7,122 55	6,176 01
Tuolumne.....	6,462 16	4,585 75	445 67	222 83	---	2,629 85	3,479 00
Ventura.....	22,035 88	15,318 57	1,519 72	759 85	---	2,837 30	717 40
Yolo.....	51,359 81	35,107 92	3,539 11	1,765 81	---	4,778 70	---
Yuba.....	17,245 66	12,030 24	1,189 35	594 68	---	1,840 25	1,607 20
Totals.....	\$2,831,302 87	\$1,914,092 37	\$196,089 62	\$96,867 50	\$44 33	\$340,572 84	\$196,425 48

Santa Barbara	719 16								99,817 14
Santa Clara	682 27								285,229 68
Santa Cruz	143 68								50,325 97
Shasta	1,192 58								36,989 67
Sierra	104 99								10,779 47
Siskiyou	3,747 05	627 20	3,902 16						46,934 43
Solano	177 60								93,406 04
Sonoma	253 87								147,885 36
Stanislaus	484 14	470 40	572 41						74,849 43
Sutter	11 76								46,869 94
Tehama	2,269 06								62,725 37
Trinity	616 73								8,641 08
Tulare	3,861 02								*124,934 58
Tuolumne	475 48								16,300 74
Ventura	341 11								43,529 83
Yolo	87 14								96,689 42
Yuba	342 12							\$10 93	34,849 50
Totals	\$74,950 87	\$2,820 94	\$7,321 88	\$7,595 65	\$7 50	\$10 93	\$4,064 61		\$5,672,245 40

*Including costs of annulment of certificates of purchase (\$49 65).

STATEMENT No. 1—Continued.

SOURCES.	Amount.	Total.
Total from counties brought forward		\$5,672,245 40
<i>From Other Sources.</i>		
Railway taxes, State portion	\$217,942 96	
Railway taxes, County portion	370,681 89	
Railway taxes, Contingent Fund	65 24	
Interest on bonds held in trust for School Fund	165,484 47	
Interest on bonds held in trust for University Fund	64,253 25	
Interest on bonds held in trust for relief of Jas. Saultry Fund	350 50	
Redemption of bonds held in trust for School Fund	76,500 00	
Redemption of bonds held in trust for University Fund	7,500 00	
Fees from Secretary of State	20,047 95	
From sales of Statutes	350 50	
From sales of ballot paper	2,892 75	
From sales of topographical maps	127 50	
From sales of Irrigation Reports	239 75	
From sales of coal screenings	135 00	
From sales of stationery	5 00	
From Surveyor-General, General Fund	22,384 00	
From Surveyor-General, State School Land Deposit Fund	1,460 00	
Register State Land Office, fees	4,143 00	
From Clerk Supreme Court, fees	10,740 10	
From Superintendent Public Instruction, sales State school text-books	130,080 05	
From Insurance Commissioner, fees	28,847 30	
From Harbor Commissioners, rent of wharves, etc.	323,384 61	
From receipts of Folsom Prison	4,797 17	
From receipts of San Quentin Prison (State Prison Fund) ..	206,859 64	
From receipts of San Quentin Prison, sales of jute fabrics (Revolving Jute Fund)	102,445 75	
Receipts from Home of Adult Blind	12,745 17	
Receipts from Home of Feeble-Minded Children	2,414 75	
Receipts from Yosemite Valley Commissioners	5,438 97	
Receipts, Fish Commissioners, sales fish licenses	2,955 25	
Receipts, Fish Commissioners, fines violation fish laws ..	488 98	
Receipts, License Collector, San Francisco, tax on stock certificate sales	5,272 15	
Receipts, Bank Commissioners	15,300 00	
Receipts, G. A. Johnson, balance of appropriation before United States Court	107 45	
Receipts, G. A. Johnson, attesting land patents	20 00	
From Sheriff San Francisco, estate of Ellen C. Moore	824 00	
From J. M. Lesser, estate of Patrick Gallagher	647 50	
From J. M. Lesser, estate of August Bailey	98 08	
From J. M. Lesser, estate of Mary Hewett	214 23	
From J. M. Lesser, estate of Gustave Helberg	628 19	
From J. D. Young, State Printer, sales paper scraps, etc.	159 44	
State Board of Forestry, overdraft on warrant	25 80	
State Board of Horticulture overdraft on warrant	25 83	
Directors Home Adult Blind, overdraft on warrant	9 90	
From Hon. P. Hersey, excess of mileage	4 00	
Geo. W. Faylor, Sergeant-at-Arms, Senate, money returned ..	94 60	
Wm. Fitzgerald, balance appropriation contingent expenses of Assembly	14 00	
From Governor Waterman, money received from United States Government due State, suppression Indian hostilities ..	11,723 64	
From Arthur Rodgers, unexpended balance of expenses Governor Bartlett's funeral	8 33	
From Board Regents University, sales Geological Reports ..	24 50	
State Board of Examiners, money invested for relief of Jas. Saultry returned	24,500 00	
		1,845,463 14
Total actual receipts		\$7,517,708 54
From transfer to Adult Blind Fund	\$21,898 14	
From transfer to San Quentin Prison Fund	14,920 00	
		36,818 14
Total net receipts		\$7,554,526 68

STATEMENT No. 2.

RECEIPTS FOR FORTY-FIRST FISCAL YEAR.

Statement of the Receipts into the State Treasury for the Forty-first Fiscal Year, ending June 30, 1890.

COUNTIES.	PROPERTY TAX.					Poll Tax.	State School Lands—16th and 36th Sections—Principal.
	General Fund.	School Fund.	Interest and Sinking Fund.	State University Fund.	Grammar School Course Fund.	State Drainage Construction Fund.	
Alameda	\$322,138 81	\$132,742 41	\$13,160 02	\$6,559 47	\$4,781 13	\$33 18	\$940 80
Alpine	754 86	370 27	33 99	16 83	10 53	---	222 70
Amador	18,896 48	8,326 16	787 55	393 42	285 41	---	2,564 05
Butte	89,946 09	37,880 69	3,656 69	1,828 34	1,373 60	---	3,694 60
Calaveras	18,238 08	7,926 26	746 65	372 11	284 07	---	7,518 80
Colusa	109,536 37	45,056 47	4,458 26	2,225 11	1,633 24	---	2,734 15
Contra Costa	64,573 02	28,475 52	2,743 90	1,370 64	826 59	54	642 88
Del Norte	8,202 26	3,612 24	333 43	166 71	131 01	---	4,063 06
El Dorado	15,214 93	6,744 87	619 44	309 63	243 87	---	765 00
Fresno	131,129 03	63,520 66	6,188 87	3,070 08	2,291 50	1 78	2,820 65
Humboldt	82,247 25	34,955 00	3,383 53	1,688 67	1,236 42	09	16,169 67
Inyo	5,116 87	2,309 61	213 00	106 49	79 21	---	7,688 25
Kern	44,896 46	19,093 63	1,826 78	913 19	691 25	---	1,117 30
Lake	17,407 10	7,554 91	710 64	353 58	273 26	57	3,901 75
Lassen	10,253 11	4,504 72	417 16	208 57	163 07	---	1,122 71
Los Angeles	371,577 55	155,575 08	15,161 57	7,576 00	5,594 42	82	15,066 86
Marin	46,586 26	19,650 76	1,891 72	945 86	712 72	---	2,262 97
Mariposa	7,415 39	3,275 07	303 49	151 58	117 11	---	3,578 50
Mendocino	49,382 02	21,004 80	2,009 92	1,003 70	709 27	20	873 80
Merced	60,852 42	25,737 98	2,475 05	1,236 64	933 29	---	2,272 30
Modoc	12,253 36	5,373 32	500 61	249 99	192 79	---	7,372 90
Mono	3,594 32	1,600 16	146 12	73 06	58 03	---	3,417 00
Monterey	62,577 43	26,767 98	2,546 18	1,272 09	969 84	---	1,586 05
Napa	62,303 28	26,364 38	2,554 12	1,266 29	954 37	06	519 35
Nevada	26,411 49	10,805 63	1,049 06	524 41	378 05	---	4,340 64
Orange	34,837 46	14,889 69	1,416 16	708 08	540 04	---	3,620 60
Placer	35,967 71	15,355 59	1,462 60	731 20	555 84	---	297 57
Plumas	9,363 88	4,116 72	383 28	191 62	147 00	---	4,291 47
Sacramento	153,916 23	63,560 64	6,269 59	3,127 98	2,304 89	---	861 42
San Benito	26,874 76	11,594 25	1,098 67	549 31	415 10	---	5,600 30
Santa Cruz	15,916 23	6,366 64	626 67	312 98	234 89	---	1,727 20
Santa Clara	15,916 23	6,366 64	626 67	312 98	234 89	---	16,581 80
Santa Fe	15,916 23	6,366 64	626 67	312 98	234 89	---	1,915 65
Santa Lucia	15,916 23	6,366 64	626 67	312 98	234 89	---	786 21
Santa Barbara	15,916 23	6,366 64	626 67	312 98	234 89	---	1,674 60
Santa Ines	15,916 23	6,366 64	626 67	312 98	234 89	---	9,875 82
Santa Jua	15,916 23	6,366 64	626 67	312 98	234 89	---	786 21

REPORT OF THE STATE CONTROLLER.

STATEMENT No. 2—Continued.

COUNTIES.	PROPERTY TAX.						Poll Tax.	State School Lands—16th and 36th Sections—Principal.
	General Fund.	School Fund.	Interest and Sinking Fund.	State University Fund.	Grammar School Course Fund.	State Drainage Construction Fund.		
San Bernardino	\$88,260 30	\$37,128 82	\$3,597 45	\$1,793 71	\$1,343 71	\$1 90	\$8,761 15	\$5,164 57
San Diego	124,753 67	52,011 71	5,103 60	2,544 03	1,866 66	6 53	11,410 45	7,129 71
San Francisco	1,329,597 06	552,296 01	54,859 56	27,269 60	18,987 03		76,435 75	
San Joaquin	167,083 71	70,230 56	6,809 67	3,404 84	2,532 13		10,954 30	
San Luis Obispo	61,764 82	26,300 64	2,514 09	1,257 05	951 06		2,462 45	5,802 82
San Mateo	61,203 85	25,920 02	2,487 96	1,243 97	940 09		2,388 50	421 29
Santa Barbara	68,946 90	29,168 11	2,805 32	1,402 13	1,055 89		4,021 30	1,417 63
Santa Clara	241,547 53	98,884 38	9,819 01	4,969 49	3,586 46		14,263 10	1,181 19
Santa Cruz	47,369 61	20,238 22	1,941 66	968 65	722 55	98	7,018 40	392 00
Shasta	22,503 52	9,715 92	923 63	456 50	350 64	56	3,921 75	10,848 60
Sierra	6,668 75	2,918 22	272 52	135 57	105 28		2,008 90	843 55
Siskiyou	23,686 91	10,217 41	963 74	481 87	377 43		3,757 60	10,594 32
Solano	83,896 53	37,980 61	3,419 39	1,709 47	1,371 58		4,574 70	6 53
Sonoma	137,233 78	56,931 90	5,579 15	2,789 25	2,064 79	55	12,575 15	1,343 63
Stanislaus	70,010 45	29,588 21	2,847 64	1,422 90	1,072 71		2,618 50	705 60
Sutter	44,323 19	18,906 80	1,804 23	902 12	683 55		3,271 30	
Tehama	48,937 90	20,774 00	1,989 56	994 78	753 26		3,490 60	6,702 04
Trinity	5,281 21	1,620 69	218 00	108 96	52 21		1,258 00	2,724 40
Tulare	101,212 73	42,601 44	4,126 71	2,056 25	1,542 33	1 86	7,955 90	6,281 80
Tuolumne	11,092 51	4,944 10	461 07	230 52	170 18		588 20	2,278 42
Ventura	35,627 42	15,337 96	1,463 71	731 74	542 73		2,943 56	2,248 02
Yolo	89,053 43	37,522 18	3,621 88	1,809 87	1,360 43		5,568 35	735 00
Yuba	29,686 55	12,783 57	1,216 77	607 56	455 79		1,870 00	617 40
Totals	\$4,821,156 70	\$2,022,646 09	\$197,364 40	\$98,422 00	\$71,775 41	\$50 95	\$352,927 70	\$168,630 56

STATEMENT No. 2—Continued.

COUNTIES.	State School Lands, 10th and 30th Sections. Interest.	State School Lands, 300,000- Acre Grant. Principal.	State School Lands, 300,000- Acre Grant. Interest.	Estates of Deceased Persons.	Taxes on Possessory Claim.	Swamp and Overflowed Lands, Dist. No. 18.	State Loan to Calaveras County.	Total from Counties.
Alameda	\$1,086 24							\$500,074 06
Alpine	13 36							1,442 14
Amador	296 67							33,980 14
Butte	455 01							146,353 82
Calaveras	296 17						\$4,186 92	35,427 43
Colusa	310 18							168,392 23
Contra Costa								108,753 42
Del Norte								15,731 19
El Dorado	117 97	\$1,019 20	\$716 97	\$1,697 69				30,495 60
Fresno	1,068 08							255,871 94
Humboldt	4,127 86	10 49	95					135,230 50
Inyo	596 52	315 23	170 56					12,346 62
Kern	764 38			1,542 16				91,473 37
Lake	6,195 07			343 04				30,214 44
Lassen	1,182 62							35,347 12
Los Angeles	3,528 63							598,318 34
Marin	1,360 83							73,315 82
Mariposa	274 87							16,929 51
Mendocino	1,321 80							85,076 91
Merced	711 15							97,714 10
Modoc	2,058 87							31,107 15
Mono	224 45							6,607 49
Monterey	1,764 85							104,530 48
Napa	169 67							99,641 39
Nevada	279 95							42,930 61
Orange								52,432 23
Placer	318 98		23 52	696 72				62,367 06
Plumas	498 69							26,304 21
Sacramento	50 96							245,802 09
San Benito	785 13							44,019 08
San Bernardino	2,808 31							148,859 92
San Diego	3,416 48							208,244 34
San Francisco				577 87	\$7 50			2,060,029 61
San Joaquin	43 12		449 17					261,507 50

STATEMENT No. 2—Continued.

COUNTIES.	State School Lands, 500,000-Acre Grant. Interest.	State School Lands, 500,000-Acre Grant. Principal.	State School Lands, 500,000-Acre Grant. Interest.	Estates of Deceased Persons.	Taxes on Possessory Claim.	Swamp and Overflowed Lands, Dist. No. 18.	State Loan to Calaveras County.	Total from Counties.
San Luis Obispo.....	\$904 17							\$101,957 10
San Mateo.....	246 66							94,852 34
Santa Barbara.....	884 98			\$79 45				109,781 80
Santa Clara.....	138 12							374,335 28
Santa Cruz.....	604 25							79,256 32
Shasta.....	1,614 02							50,335 17
Sierra.....	492 80							13,505 69
Siskiyou.....	452 78	\$627 20	\$126 75					51,316 01
Solano.....	26 68							132,985 49
Sonoma.....	272 21							218,790 44
Stanislaus.....	318 97							108,584 98
Sutter.....								69,891 19
Tehama.....	777 73							84,419 87
Trinity.....	383 81							11,557 28
Tulare.....	2,448 63							168,227 55
Tuolumne.....	309 51							20,074 51
Ventura.....	484 79							59,329 92
Yolo.....	104 73					\$103 26		139,879 13
Yuba.....	62 29							47,269 93
Totals.....	\$47,583 90	\$1,972 12	\$1,487 92	\$4,036 93	\$7 50	\$103 26	\$4,186 92	\$7,793,251 76

STATEMENT No. 2—Continued.

RESOURCES.	Amount.	Total.
Total from counties brought forward		\$7,793,251 76
<i>From Other Sources.</i>		
Railway taxes, State's portion, General Fund	\$199,212 93	
Railway taxes, State's portion, School Fund	78,154 72	
Railway taxes, State's portion, Interest and Sinking Fund ..	8,099 63	
Railway taxes, State's portion, University Fund	4,049 50	
Railway taxes, State's portion, Grammar School Course Fund ..	2,833 18	
Railway taxes, State's portion, penalties	59 42	
		292,409 38
Railway taxes, counties' portion		375,776 39
Interest on bonds held in trust for the School Fund		216,943 38
Interest on bonds held in trust for the University Fund		86,458 32
Redemption of bonds held in trust for the School Fund		85,000 00
Redemption of bonds held in trust for the University Fund ..		2,000 00
From Secretary of State, fees of office	\$19,202 55	
From Secretary of State, sales of statutes	160 00	
From Secretary of State, sales of ballot paper	3,155 00	
From Secretary of State, sales of Irrigation Reports	299 00	
From Secretary of State, sales of topographical maps	77 50	
From Secretary of State, sales of constitutional debates	10 00	
From Secretary of State, sales of old carpets	116 20	
		23,020 25
From Surveyor-General, fees of office, General Fund	\$7,299 50	
From Surveyor-General, fees of office, S. S. Land Deposit Fund ..	21,920 00	
		29,219 50
From Register State Land Office, fees of office		3,698 50
From Clerk of Supreme Court, fees of office		11,965 90
From Insurance Commissioner, fees of office		31,628 77
From State Board of Harbor Commissioners, rents of wharves, dockage, etc.		314,117 17
From Yosemite Valley Commissioners, rent and privileges		4,145 20
From Bank Commissioners, from banks		15,300 00
From Trustees Home Adult Blind, receipts from Home		16,808 55
From Trustees Home Feeble-Minded Children, receipts from Home ..		2,663 55
From John McComb, Warden San Quentin Prison, sales of goods, Prison Fund		54,763 12
From John McComb, Warden San Quentin Prison, sales of jute goods, Jute Revolving Fund		150,054 89
From Charles Aull, Warden Polsom Prison, sales of goods		1,333 65
From Superintendent of Public Instruction, sales of school text-books		60,165 18
From T. I. O'Brien, License Collector, San Francisco, ten-cent stock certificate tax		6,051 55
From State Board Fish Commissioners, from fines violation fish laws	\$1,202 96	
From State Board Fish Commissioners, sales fish licenses	4,046 88	
From State Board Fish Commissioners, from sale of boat "Gov. Stoneman"	1,100 00	
		6,349 84
From J. D. Ingersoll, J. P. at Rio Vista, fines violation fish laws		33 33
From Jas. P. Martin, Sheriff Solano County, fines violation fish laws		26 00
From Attorney-General G. A. Johnson, amount recovered from T. C. Van Ness		3,985 34
From Attorney-General G. A. Johnson, unexpended balance of warrant drawn for costs in litigation before United States Supreme Court		95 50
From J. D. Young, State Printer, sales scrap paper, etc.		349 43
From J. P. Dunn, State Controller, sales of pure wine labels ..		255 00
From J. W. Bartlett, attorney at law, estate of Wm. McElaney, deceased, Trinity County		1,553 93
From H. E. Sanborn, attorney at law, estate of John B. Giles, deceased, Sutter County		152 95
Amount carried forward		\$9,589,576 33

REPORT OF THE STATE CONTROLLER.

STATEMENT No. 2—Continued.

RESOURCES.	Amount.	Total.
Amount brought forward.....	-----	\$9,589,576 33
From C. A. H. Warfield, Sheriff Merced County, estate of John Joseph, deceased.....	-----	71 90
From Trustees State Library, overpayment returned.....	-----	10 09
From M. D. Boruck, overpayment returned.....	-----	5 30
Total actual receipts.....	-----	\$9,589,663 62
From canceled warrants.....	909 16	
From transfer to Revolving Jute Fund.....	60,000 00	
From transfer to Southern California Insane Asylum Hos- pital Fund.....	350,000 00	410,909 16
Total net receipts.....	-----	\$10,000,572 78

STATEMENT No 3.

EXPENDITURES FOR FORTIETH FISCAL YEAR.

Statement of Amount of Each Appropriation, the Amount Expended, and the Total Expended During the Fiscal Year Ending June 30, 1889.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, 40th Fiscal Year.	Amount Expended during 40th Fiscal Year.	Amount Unexpended during 40th Fiscal Year.	Total Amount Expended during 40th Fiscal Year.
<i>Legislative Department.</i>						
Mar. 18, 1887.	Per diem and mileage of Lieutenant-Governor and Senators	-----	\$21,000 00	\$20,352 80	\$647 20	
Mar. 18, 1887.	Pay of officers and clerks of the Senate	-----	5,500 00		86 00	
Mar. 8, 1889.	Pay of officers and clerks of the Senate	-----	1,000 00	6,414 00	.	
Mar. 18, 1887.	Contingent expenses of the Senate	-----	12,000 00		3,546 79	
Feb. 1, 1889.	Contingent expenses of the Senate	-----	25,000 00	53,453 21		
Mar. 6, 1889.	Contingent expenses of the Senate	-----	20,000 00			
Mar. 18, 1887.	Per diem and mileage of Assemblymen	-----	41,500 00	40,780 60	719 40	
Mar. 18, 1887.	Pay of officers and clerks of the Assembly	-----	6,500 00		1,322 00	
Mar. 8, 1889.	Pay of officers and clerks of the Assembly	-----	2,000 00	7,178 00		
Mar. 18, 1887.	Contingent expenses of the Assembly	-----	18,000 00			
Feb. 12, 1889.	Contingent expenses of the Assembly	-----	30,000 00	60,645 14	7,354 86	
Mar. 8, 1889.	Contingent expenses of the Assembly	-----	20,000 00			
<i>Judicial Department.</i>						
Mar. 18, 1887.	State's portion of salaries of Judges of Superior Courts	-----	\$127,500 00	\$127,079 29	\$5,753 71	
Mar. 6, 1889.	State's portion of salaries of Judges of Superior Courts	-----	5,333 00		450 00	
Mar. 18, 1887.	Salaries of Justices of Supreme Court.	-----	42,000 00	41,550 00		
Mar. 18, 1887.	Salary of Clerk of Supreme Court.	-----	3,000 00	3,000 00		
Mar. 18, 1887.	Salaries of Deputy Clerks of Supreme Court.	-----	9,000 00	9,000 00		
Mar. 18, 1887.	Pay of Porter to Clerk of Supreme Court.	-----	300 00	300 00		
Mar. 11, 1889.	Postage and contingent expenses of Clerk of Supreme Court, thirty-seventh fiscal year	-----				
Mar. 18, 1887.	Postage and contingent expenses of Clerk of Supreme Court	-----	4 46	4 46		
Mar. 18, 1887.	Postage and contingent expenses of Clerk of Supreme Court	\$114 00	23 40	23 40	90 60	
Mar. 18, 1887.	Salary of Reporter of Decisions of Supreme Court.	-----	300 00	207 95	92 05	
Feb. 19, 1889.	Salary of Deputy Reporter of Decisions of Supreme Court.	-----	2,500 00	2,500 00		
Mar. 18, 1887.	Salaries of Secretaries to Justices of Supreme Court.	-----	2,200 00	2,200 00		
Mar. 8, 1889.	Salaries of Secretaries to Justices of Supreme Court.	-----	3,200 00	4,800 00		
Mar. 8, 1889.	Salaries of Secretaries to Justices of Supreme Court, thirty-eighth fiscal year	-----	1,600 00			
Mar. 8, 1889.	Salaries of Secretaries to Justices of Supreme Court, thirty-eighth fiscal year	-----	444 70	444 70		
Amount carried forward						\$188,823 75

STATEMENT No. 3.—Continued.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, 40th Fiscal Year.	Amount Expended during 40th Fiscal Year.	Amount Unexpended during 40th Fiscal Year.	Total Amount Expended during 40th Fiscal Year.
Mar. 8, 1889.	Amount brought forward					\$188,823 75
Mar. 8, 1889.	Salaries of Secretaries to Justices of Supreme Court, thirty-ninth fiscal year		\$1,580 00	\$1,580 00		
Mar. 18, 1887.	Salary of Photographic Reporter of Supreme Court		3,000 00	3,000 00		
Mar. 18, 1887.	Salaries of Bailiffs of Supreme Court		2,400 50	2,250 00	\$150 50	
Mar. 10, 1885.	Salaries of Bailiffs of Supreme Court, thirty-eighth fiscal year	\$1,200 00		83 35	1,116 65	
Mar. 18, 1887.	Salaries of Supreme Court Commissioners	18,000 00	62,900 00	19,416 65	61,483 35	
Feb. 15, 1889.	Salary of Secretary to Supreme Court Commissioners		2,400 00	2,400 00		
Feb. 15, 1889.	Salary of Secretary to Supreme Court Commissioners		4,800 00		4,800 00	
Mar. 18, 1887.	Rent of Chambers Supreme Court Commissioners	250 00		250 00		
Mar. 18, 1887.	Rent of Chambers Supreme Court Commissioners		1,500 00	1,375 00	125 00	
Mar. 18, 1887.	Contingent expenses Secretary Supreme Court Commissioners		50 00	49 90	10	
Mar. 8, 1889.	Expenses Supreme Court, Section 47, C. of C. P., thirty-ninth fiscal year		270 62	270 62		
Mar. 18, 1887.	Expenses Supreme Court, Section 47, C. of C. P.	1,906 07		1,906 07		
Mar. 18, 1887.	Expenses Supreme Court, Section 47, C. of C. P.		16,000 00	14,711 56	1,288 44	
Mar. 18, 1887.	Postage and contingent expenses Supreme Court	7 50				
Mar. 8, 1889.	Postage and contingent expenses Supreme Court		6 50	13 85	15	
Mar. 18, 1887.	Postage and contingent expenses Supreme Court		150 00	150 00		
-----	Support Supreme Court Library (from fees)			2,212 80		
	<i>Executive Department.</i>					240,779 60
Mar. 18, 1887.	Salary of Governor		\$6,000 00	\$6,000 00		
Mar. 18, 1887.	Salary of Governor's Private Secretary		3,600 00	3,327 71	\$272 29	
Mar. 18, 1887.	Salary of Executive Secretary and ex officio Secretary of State					
Mar. 19, 1889.	Capital Commissioners		2,000 00		75 03	
Mar. 18, 1887.	Salary of Executive Secretary and ex officio Secretary of State					
Mar. 18, 1887.	Capitol Commissioners					
Mar. 18, 1887.	Secretary State Board of Examiners		250 00			
Mar. 18, 1887.	Pay of Porter, Governor's office		1,800 00	1,800 00		
Mar. 11, 1889.	Special Contingent Fund (secret service), thirty-eighth fiscal year		600 00	600 00		
Mar. 18, 1887.	Special Contingent Fund (secret service)		100 00	100 00		
Mar. 18, 1887.	Special Contingent Fund (secret service)	\$50 00				
Mar. 18, 1887.	Postage and expressage, Governor's office		2,500 00	2,550 00		
Mar. 18, 1887.	Postage and expressage, Governor's office	14 48		7 50	01	
Mar. 18, 1887.	Postage and expressage, State Board of Examiners	7 85	500 00	506 97		
Mar. 18, 1887.	Postage and expressage, State Board of Examiners		100 00	1 80	19 02	
Mar. 18, 1887.	Postage and expressage, State Board of Examiners			87 03		
						17,155 98

STATEMENT No. 3.—Continued.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, 40th Fiscal Year.	Amount Expended during 40th Fiscal Year.	Amount Unexpended during 40th Fiscal Year.	Total Amount Expended during 40th Fiscal Year.
	Amount brought forward.....					\$486,298 02
Mar. 18, 1887.	Traveling expenses.....		\$1,000 00	\$314 50	\$685 50	
Mar. 10, 1889.	Costs and expenses of suits where State is a party in interest.....	\$128 40		9 40	119 00	
Mar. 18, 1887.	Costs and expenses of suits where State is a party in interest.....	1,199 63		1,134 46	65 18	
Mar. 18, 1887.	Costs and expenses of suits where State is a party in interest.....		2,500 00	926 49	1,573 51	
	<i>Surveyor-General's Office.</i>					8,665 25
Mar. 18, 1887.	Salary of Surveyor-General.....		\$3,000 00	\$3,000 00		
Mar. 18, 1887.	Salary of Deputy Surveyor-General.....		2,400 00	2,400 00		
Mar. 18, 1887.	Salaries of Clerks.....		4,800 00	4,800 00		
Mar. 21, 1889.	Salary of Clerk, Register of State Land Office.....		600 00	339 90	\$200 10	
Mar. 18, 1887.	Pay of Porter.....		300 00	300 00		
Mar. 18, 1887.	Postage and expressage.....		300 00	300 00		
Mar. 18, 1887.	Contingent expenses.....	\$9 50		9 50		
Mar. 18, 1887.	Contingent expenses.....		100 00	78 60	21 40	
Mar. 18, 1887.	Purchasing and copying of maps.....	613 00		1,006 00	13	
Mar. 18, 1887.	Purchasing and copying of maps.....		1,000 00	1,941 33	3,058 67	
Feb. 26, 1889.	Correction of eastern boundary line of State.....		5,000 00			
	<i>Superintendent of Public Instruction.</i>					14,235 33
Mar. 18, 1887.	Salary of Superintendent.....		\$3,000 00	\$3,000 00		
Mar. 16, 1889.	Salary of Deputy Superintendent, thirty-eighth fiscal year.....		193 33	193 33		
Mar. 18, 1887.	Salary of Deputy Superintendent.....		2,400 00	2,400 00		
Mar. 18, 1887.	Salary of Clerk.....		1,600 00	1,600 00		
Mar. 15, 1889.	Salary of Special Clerk.....		1,468 67	1,466 67		
Mar. 1, 1889.	Salary of Special Clerk.....		1,600 00	1,466 65	\$133 35	
Mar. 18, 1887.	Pay of Porter.....		300 00	300 00		
Mar. 18, 1887.	Postage, expressage, etc.....	\$139 51		134 89	4 62	
Mar. 18, 1887.	Postage, expressage, etc.....		800 00	797 66	2 34	
Mar. 18, 1887.	Contingent expenses.....	43 24		36 27	6 97	
Mar. 18, 1887.	Contingent expenses.....		100 00	75 22	24 78	
Mar. 15, 1889.	Traveling expenses, thirty-eighth fiscal year.....		46 50	46 50		
Mar. 18, 1887.	Traveling expenses.....	631 60		288 45	343 16	
Mar. 18, 1887.	Traveling expenses.....		1,500 00	1,132 55	367 45	
	<i>State Library.</i>					12,938 19
Mar. 18, 1887.	Salary of Librarian.....		\$3,000 00	\$3,000 00		
Mar. 18, 1887.	Salary of Deputy Librarians.....		3,600 00	3,600 00		

Mar. 18, 1887.	Pay of Porter			900 00	500 00	\$1 70
Mar. 18, 1887.	Postage and expressage				60 65	10 86
Mar. 18, 1887.	Postage and expressage			200 00	189 12	
Mar. 18, 1887.	Support of State Library (from Library Fund)				13,074 69	
	<i>National Guard.</i>					
Mar. 18, 1887.	Salary Adjutant-General			\$3,000 00	\$3,000 00	
Mar. 14, 1889.	Salary Assistant Adjutant-General			1,250 00		\$73 35
Mar. 18, 1887.	Salary Assistant Adjutant-General			1,800 00	1,976 65	
Mar. 18, 1887.	Pay of Porter			300 00	300 00	
Mar. 18, 1887.	Postage and expressage		\$9 37		8 54	83
Mar. 18, 1887.	Postage and expressage			200 00	200 00	
Mar. 18, 1887.	Care of State Armory, etc.		19 40		19 40	
Mar. 18, 1887.	Payment of Armory rents, etc.			750 00	714 05	35 95
Mar. 18, 1887.	Payment of Armory rents, etc.		24,121 85		24,121 85	
Mar. 14, 1889.	Payment of Armory rents, etc.			70,000 00	63,989 03	22,610 97
Mar. 18, 1887.	Expenses of encampment, N. G. C.		1,814 22		1,814 22	
Mar. 18, 1887.	Target practice, N. G. C.		1,198 15		1,177 50	20 65
Mar. 18, 1887.	Target practice, N. G. C.			1,750 00	1,319 22	430 78
Mar. 18, 1887.	Purchase of uniforms, N. G. C.		23,994 35		19,826 67	4,467 68
	<i>State Printing Office.</i>					
Mar. 18, 1887.	Salary of Superintendent			\$3,000 00	\$3,000 00	
Mar. 4, 1889.	Support State Printing Office, thirty-eighth fiscal year			17,051 60	17,017 07	\$34 53
Jun. 24, 1889.	Support State Printing Office			70,000 00	123,994 53	9,869 54
Mar. 18, 1887.	Support State Printing Office		\$63,894 07		35,070 01	35,213 14
Mar. 15, 1887.	Printing State school text-books		70,883 15		4,809 25	13,258 28
Mar. 18, 1887.	Compiling State school text-books		17,567 53			
Mar. 15, 1887.	Manufacturing State school text-books (from State School Book Fund)				64,271 42	
Mar. 15, 1887.	Construction of warehouse for text-books		9,780 00		9,471 51	308 49
Mar. 14, 1889.	Enlarging and strengthening State Printing Office			11,000 00	17 00	10,983 00
	<i>State Engineer's Department.</i>					
Mar. 18, 1887.	Salary State Engineer		\$2,500 00		\$2,500 00	
Mar. 4, 1889.	Salary of Secretary to State Engineer, thirty-fifth, thirty-sixth, thirty-seventh, and thirty-eighth fiscal years				3,200 00	\$3,200 00
Mar. 18, 1887.	Maintenance of State Engineer's Department		527 35		527 35	
Mar. 18, 1887.	Publication of reports and maps of the irrigation and drainage surveys			\$7,500 00	4,750 25	2,749 75
	Amount carried forward					10,977 60
						\$923,856 67

20,824 36

119,167 13

257,750 79

STATEMENT No. 3—Continued.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, 40th Fiscal Year.	Amount Expended during 40th Fiscal Year.	Amount Unexpended during 40th Fiscal Year.	Total Amount Expended during 40th Fiscal Year.
	Amount brought forward.....					\$929,856 67
	<i>State Board of Health.</i>					
Mar. 18, 1887.	Salary of Secretary.....	\$187 74	\$2,500 00	\$2,291 30	\$208 70	
Mar. 18, 1887.	Mileage and contingent expenses.....			57 15	130 59	
Mar. 18, 1887.	Mileage and contingent expenses.....		1,250 00	1,640 57	109 43	
Mar. 7, 1889.	Mileage and contingent expenses.....		500 00			
Mar. 4, 1887.	Prevention of introduction of contagious diseases.....		7,493 90	611 45	6,982 45	
	<i>State Board of Equalization.</i>					4,500 47
Mar. 18, 1887.	Salaries of members.....		\$12,000 00	\$12,000 00		
Mar. 18, 1887.	Salary of Clerk.....		2,400 00	2,400 00		
Mar. 18, 1887.	Pay of Porter.....		200 00	200 00		
Mar. 18, 1887.	Postage and expressage.....	\$868 14		45 68	\$822 46	
Mar. 18, 1887.	Postage and expressage.....		1,000 00	162 87	837 13	
Mar. 8, 1889.	Traveling and contingent expenses, thirty-eighth fiscal year.....		399 80	387 09	11 71	
Mar. 8, 1887.	Traveling and contingent expenses.....	2,407 10		806 95	1,000 15	
Mar. 8, 1887.	Traveling and contingent expenses.....		5,000 00	2,702 85	2,297 15	
	<i>Railroad Commissioners.</i>					18,705 44
Mar. 18, 1887.	Salaries of Commissioners.....		\$12,000 00	\$12,000 00		
Mar. 18, 1887.	Salary of Secretary.....		2,400 00	2,400 00		
Mar. 18, 1887.	Salary of Bailiff.....		1,200 00	1,200 00		
Mar. 18, 1887.	Traveling expenses.....	\$172 60		39 75	\$132 85	
Mar. 18, 1887.	Traveling expenses.....		250 00	108 50	141 50	
Mar. 18, 1887.	Office rent.....	75 00		75 00		
Mar. 18, 1887.	Office rent.....		900 00	825 00	75 00	
Mar. 18, 1887.	Fuel, lights, postage, etc.....	186 40		186 40		
Mar. 18, 1887.	Fuel, lights, postage, etc.....		500 00	592 70	107 30	
Feb. 28, 1889.	Pay of Stenographer, thirty-ninth and fortieth fiscal years.....		3,000 00	2,866 60	133 40	
	<i>Insurance Commissioner.</i>					20,093 95
Mar. 18, 1887.	Salary of Commissioner.....		\$3,000 00	\$3,000 00		
Mar. 18, 1887.	Salary of Deputy.....		1,900 00	1,800 00		
Mar. 4, 1887.	Rent and contingent expenses (from Special Fund).....	\$884 55		118 00	\$766 55	
Mar. 4, 1887.	Rent and contingent expenses (from Special Fund).....		2,000 00	1,355 45	644 55	
						6,273 45

STATEMENT No. 3—Continued.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, 40th Fiscal Year.	Amount Expended during 40th Fiscal Year.	Amount Unexpended during 40th Fiscal Year.	Total Amount Expended during 40th Fiscal Year.
Mar. 18, 1887.	Amount brought forward.....	\$297 30		\$295 63	\$1 67	\$1,070,115 67
Mar. 18, 1887.	Uses of State Board of Horticulture.....		\$10,000 00		52 73	
Mar. 7, 1889.	Uses of State Board of Horticulture.....		1,000 00			
May 14, 1889.	Amount returned by Secretary of Board.....		25 83	10,973 70		
Mar. 18, 1887.	<i>State Board of Viticulture.</i>					12,414 56
Mar. 18, 1887.	Uses of.....	\$7,433 23		\$2 161 81	\$2,053 57	
Mar. 18, 1887.	Uses of.....		\$15,000 00	18,217 85		20,379 66
Mar. 18, 1887.	<i>State Board of Silk Culture.</i>					
Mar. 18, 1887.	Support of.....	\$209 17	\$2,500 00	\$207 15	\$2 02	2,213 83
Mar. 18, 1887.	Support of.....			2,006 68	493 32	
Mar. 18, 1887.	<i>Deaf, Dumb, and Blind Asylum.</i>					
Mar. 18, 1887.	Support of.....	\$2,822 73		\$2,822 73		
Mar. 18, 1887.	Support of.....		\$45,750 00	44,283 28	\$1,466 72	
Mar. 4, 1887.	Erection of hothouse.....	854 10		815 60	38 50	
Mar. 4, 1887.	Painting buildings.....	137 13		137 13		
Mar. 4, 1887.	Grading streets.....		1,000 00	191 00	809 00	
Mar. 4, 1887.	Completing Educational Building.....	29,178 30		55 25	29,123 05	48,304 99
Mar. 17, 1887.	<i>Industrial Home of Mechanical Trades for the Adult Blind.</i>					
Mar. 17, 1887.	Support (from Adult Blind Fund).....			\$32,360 19		
Mar. 17, 1887.	Purchase of a site (from Adult Blind Fund).....	\$2,065 95		2,065 95		
Mar. 14, 1889.	Releasing mortgage on property (from Adult Blind Fund).....		\$668 40	668 40		
Mar. 14, 1889.	Construction of dormitory (from Adult Blind Fund).....		205 20	205 20		
Mar. 18, 1887.	<i>Asylums for Insane.</i>					35,299 74
Mar. 18, 1887.	Support of Asylum at Stockton.....	\$20,738 30		\$20,738 30		
Mar. 18, 1887.	Support of Asylum at Stockton.....		\$200,000 00	233,741 81	\$4,909 44	
Mar. 11, 1889.	Support of Asylum at Stockton.....		38,651 25			
Mar. 12, 1887.	Construction of canal, etc., at Stockton.....	39,915 00		14,526 66	25,388 34	
Mar. 18, 1887.	Support of Asylum for Insane at Napa.....	\$12,966 90		\$12,966 90		269,006 77
Mar. 4, 1889.	Support of Asylum for Insane at Napa.....		\$45,569 47	213,035 98	\$22,533 49	
Mar. 16, 1887.	Support of Asylum for Insane at Napa.....		190,000 00			

New flooring of Asylum for Insane at Napa.					2,000 00	1,284 69	715 31	227,287 57
Mar. 16, 1889.								
Mar. 18, 1887.	Support of California Hospital for Insane at Agnews	\$49,102 94				\$3,480 70	\$45,622 24	
Mar. 18, 1887.	Support of California Hospital for Insane at Agnews	45,622 24			\$67,000 00	60,891 41	51,730 85	
Mar. 18, 1887.	Furnishing California Hospital for Insane at Agnews	13,991 85					2,321 38	
Mar. 14, 1889.	Furnishing California Hospital for Insane at Agnews				5,000 00	16,670 47		
Mar. 18, 1887.	Purchase of cows and other live stock					849 47	50 53	
Mar. 18, 1887.	Improvement of grounds	900 00			2,500 00	2,500 00		
Mar. 4, 1887.	Erection of additional buildings	102,585 30			125,000 00	219,736 03	7,849 27	
Mar. 4, 1887.	Erection of additional buildings				2,280 48	2,280 48		
Mar. 16, 1889.	For the payment of certain claims							306,408 56
<i>Feeble-Minded Children.</i>								
Mar. 18, 1887.	Support of Home	\$8,434 25				\$2,316 94	\$6,117 31	
Mar. 18, 1887.	Support of Home				\$31,550 00	23,476 65	8,073 35	
Mar. 18, 1887.	Permanent improvements	8,281 51				3,808 00	4,473 51	
Mar. 8, 1889.	Care and training of feeble-minded children, thirty-eighth fiscal year				10,921 34	10,921 34		40,522 93
Mar. 4, 1889.	Transportation of insane, thirty-seventh and thirty-eighth fiscal years							
Mar. 10, 1885.	Transportation of insane, thirty-eighth fiscal year				\$516 13	\$465 33	\$50 80	
Mar. 18, 1887.	Transportation of insane	\$574 75				56 30	518 45	
Mar. 18, 1887.	Transportation of insane	7,530 50				5,028 35		
Mar. 18, 1887.	Transportation of insane				30,000 00	29,183 00	3,319 15	
<i>State Prisons.</i>								
Mar. 18, 1887.	Support of State Prison at San Quentin	\$25,579 85				\$25,579 85		
Mar. 18, 1887.	Support of State Prison at San Quentin				\$201,000 00	201,000 00		
Mar. 24, 1887.	Purchase of jute machinery	159,858 00				75 00	\$159,783 00	
Mar. 19, 1889.	Purchase of lands adjacent to prison				7,700 00	3,900 00	3,800 00	
Mar. 10, 1885.	* Use of prison (from San Quentin Prison Fund)					88,795 05		
Mar. 10, 1885.	Purchase of jute (from Jute Revolving Fund)					47,525 75		366,875 66
Mar. 18, 1887.	Support of State Prison at Folsom	\$29,624 71				\$18,248 43	\$11,376 28	
Mar. 18, 1887.	Support of State Prison at Folsom				\$125,000 00	56,451 96	28,548 04	
Amount carried forward								\$2,548,263 31

* Included in the expenditure of \$88,795 05 is the sum of \$14,920, which should be deducted to show actual expenditures, and the sum of \$11,920 added to \$17,525 75 of Jute Revolving Fund. (See voucher 7,497, fortieth fiscal year.)

STATEMENT No. 3—Continued.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, 40th Fiscal Year.	Amount Expended during 40th Fiscal Year.	Amount Unexpended during 40th Fiscal Year.	Total Amount Expended during 40th Fiscal Year.
Mar. 11, 1880.	Amount brought forward— Erection, equipment, and maintenance of Reform School for Juvenile Offenders.....		\$200,000 00	\$3,324 36	\$196,675 64	\$2,548,265 31
Mar. 4, 1889.	Transportation of prisoners, thirty-seventh fiscal year.....		\$334 69	\$334 69	\$2,528 57	
Mar. 10, 1886.	Transportation of prisoners, thirty-eighth fiscal year.....	\$2,550 57		2 00	4,718 61	
Mar. 18, 1887.	Transportation of prisoners.....	9,765 76		5,047 15	5,153 76	
Mar. 18, 1887.	Transportation of prisoners.....		\$27,500 00	22,346 24		
	<i>Wharves and Docks.</i>					
	Improvement of wharves and docks, San Francisco (from Harbor Improvement Fund).....			\$259,614 05		27,730 08
	<i>Orphan Asylums.</i>					
Mar. 25, 1880.	Support of orphans, etc., last half of thirty-ninth fiscal year.....			\$113,419 65		259,614 05
Mar. 25, 1880.	Support of orphans, etc., first half of fortieth fiscal year.....			112,412 22		
	<i>Aid to Aged Persons in Indigent Circumstances.</i>					
Mar. 15, 1883.	Support for thirty-fifth fiscal year paid in fortieth fiscal year.....			\$8,458 40		
Mar. 15, 1883.	Support for thirty-sixth fiscal year paid in fortieth fiscal year.....			11,251 95		
Mar. 15, 1883.	Support for thirty-seventh fiscal year paid in fortieth fiscal year.....			13,703 02		
Mar. 16, 1883.	Support for thirty-eighth fiscal year paid in fortieth fiscal year.....			20,783 81		
Mar. 15, 1883.	Support for thirty-ninth fiscal year paid in fortieth fiscal year.....			85,324 74		
Mar. 15, 1883.	Support for first half of fortieth fiscal year.....			70,506 16		
	<i>Veterans' Home.</i>					
Mar. 7, 1883.	Aid to Veterans' Home.....			\$32,637 99		210,028 08
	<i>Agricultural Societies.</i>					
Mar. 18, 1887.	Aid to State Agricultural Society.....		17,500 00	17,500 00		32,637 99
Mar. 18, 1887.	Aid to District Agricultural Society No. 1.....		2,500 00	2,500 00		
Mar. 18, 1887.	Aid to District Agricultural Society No. 2.....		2,500 00	2,500 00		
Mar. 18, 1887.	Aid to District Agricultural Society No. 3.....		2,000 00	2,000 00		
Mar. 18, 1887.	Aid to District Agricultural Society No. 4.....		2,500 00	2,500 00		
Mar. 18, 1887.	Aid to District Agricultural Society No. 5.....		1,800 00	1,800 00		
Mar. 18, 1887.	Aid to District Agricultural Society No. 6.....		2,500 00	2,500 00		
Mar. 18, 1887.	Aid to District Agricultural Society No. 7.....		1,500 00	1,500 00		

Mar. 18, 1887.	Aid to District Agricultural Society No. 8	1,200 00	1,200 00	1,200 00	54,007 50
Mar. 18, 1887.	Aid to District Agricultural Society No. 9	1,000 00	1,000 00	1,000 00	
Mar. 18, 1887.	Aid to District Agricultural Society No. 10	1,000 00	1,000 00	1,000 00	
Mar. 18, 1887.	Aid to District Agricultural Society No. 11	1,500 00	1,500 00	1,500 00	
Mar. 18, 1887.	Aid to District Agricultural Society No. 12	1,500 00	1,500 00	1,500 00	
Mar. 18, 1887.	Aid to District Agricultural Society No. 13	2,000 00	2,000 00	2,000 00	
Mar. 18, 1887.	Aid to District Agricultural Society No. 14	750 00	750 00	750 00	
Mar. 18, 1887.	Aid to District Agricultural Society No. 15	750 00	750 00	750 00	
Mar. 18, 1887.	Aid to District Agricultural Society No. 16	2,000 00	2,000 00	2,000 00	
Mar. 18, 1887.	Aid to District Agricultural Society No. 17	2,000 00	2,000 00	2,000 00	
Mar. 18, 1887.	Aid to District Agricultural Society No. 18	1,500 00	1,500 00	1,500 00	
Mar. 18, 1887.	Aid to District Agricultural Society No. 19	1,250 00	1,250 00	1,250 00	
Mar. 18, 1887.	Aid to District Agricultural Society No. 21	1,250 00	1,250 00	1,250 00	
Mar. 18, 1887.	Aid to District Agricultural Society No. 25	1,200 00	1,200 00	1,200 00	
Mar. 18, 1887.	Aid to District Agricultural Society No. 26				
Mar. 18, 1887.	Traveling expenses.	\$131 00		\$38 85	
Mar. 18, 1887.	Traveling expenses.		\$350 00	341 00	
Mar. 18, 1887.	Traveling expenses.			8 40	
Mar. 18, 1887.	Traveling expenses.				380 45
Mar. 26, 1872.	Support of (from University Fund)			\$64,287 50	
Feb. 14, 1887.	Support of (from ad valorem tax)			108,348 38	
Mar. 10, 1886.	Support of Department of Mechanical Engineering	\$521 17		280 00	
Mar. 10, 1886.	Use of College of Mines	434 13		434 13	
-----	Annual reimbursement			4,785 00	
-----	Payment of money held in trust (redemption of bonds)			7,500 00	
-----	-----				175,035 01
Mar. 18, 1887.	Support State Normal School at San José	\$2,046 61		\$2,944 55	
Mar. 18, 1887.	Support State Normal School at San José		\$39,000 00	37,496 67	
Mar. 18, 1887.	Use of Library, State Normal School at San José		1,000 00	658 69	
Mar. 18, 1887.	Support State Normal School at Los Angeles	\$2,295 81		\$1,880 12	
Mar. 18, 1887.	Support State Normal School at Los Angeles	376 69	\$18,000 00	18,281 99	
Mar. 18, 1887.	Use of Library and Museum, Normal School at Los Angeles		1,000 00	900 95	
Mar. 18, 1887.	Care of grounds, Normal School at Los Angeles	40 55		40 50	
Mar. 18, 1887.	Care of grounds, Normal School at Los Angeles		750 00	697 00	
Mar. 8, 1889.	Improvement of grounds, thirty-eighth fiscal year		278 69	278 69	
Mar. 9, 1887.	Establishing Branch Normal School in Northern California	\$39,294 32		\$39,294 32	
Mar. 1, 1889.	Constructing and completing Chico Normal School		\$39,000 00	18,337 27	
-----	Amount carried forward				\$3,658,332 45

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STATEMENT No. 3—Continued.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, 40th Fiscal Year.	Amount Expended during 40th Fiscal Year.	Amount Unexpended during 40th Fiscal Year.	Total Amount Expended during 40th Fiscal Year.
	Amount brought forward.....					\$3,658,332 45
	<i>Support Common Schools.</i>					
	Paid Alameda County.....			\$198,768 96		
	Paid Alpine County.....			699 41		
	Paid Amador County.....			28,538 64		
	Paid Butte County.....			39,180 96		
	Paid Calaveras County.....			22,108 32		
	Paid Colusa County.....			30,504 24		
	Paid Contra Costa County.....			31,384 08		
	Paid Del Norte County.....			4,754 88		
	Paid El Dorado County.....			21,284 64		
	Paid Fresno County.....			54,858 96		
	Paid Humboldt County.....			52,969 20		
	Paid Inyo County.....			4,509 02		
	Paid Kern County.....			15,228 72		
	Paid Lake County.....			16,698 24		
	Paid Lassen County.....			9,303 84		
	Paid Los Angeles County.....			255,060 00		
	Paid Marin County.....			21,462 48		
	Paid Mariposa County.....			9,219 60		
	Paid Mendocino County.....			66,499 43		
	Paid Merced County.....			14,704 56		
	Paid Modoc County.....			13,412 88		
	Paid Mono County.....			5,244 13		
	Paid Monterey County.....			40,762 80		
	Paid Napa County.....			33,340 32		
	Paid Nevada County.....			44,169 84		
	Paid Placer County.....			27,443 52		
	Paid Plumas County.....			8,365 09		
	Paid Sacramento County.....			80,533 44		
	Paid San Benito County.....			18,242 64		
	Paid San Bernardino County.....			55,064 88		
	Paid San Diego County.....			73,563 28		
	Paid San Francisco County.....			558,913 68		
	Paid San Joaquin County.....			58,986 72		
	Paid San Luis Obispo County.....			38,834 64		
	Paid San Mateo County.....			24,111 36		

Paid Santa Barbara County	38,862 72			
Paid Santa Clara County	106,384 24			
Paid Santa Cruz County	40,800 24			
Paid Shasta County	30,522 96			
Paid Sierra County	8,603 40			
Paid Siskiyou County	22,960 08			
Paid Solano County	42,372 72			
Paid Sonoma County	79,120 08			
Paid Stanislaus County	22,464 00			
Paid Sutter County	12,383 28			
Paid Tehama County	25,028 64			
Paid Trinity County	7,057 44			
Paid Tulare County	54,250 56			
Paid Tuolumne County	14,826 24			
Paid Yuba County	17,002 60			
Paid Yolo County	30,148 66			
Paid Yuba County	20,563 92			
<i>State Capitol Building and Grounds.</i>				
Mar. 20, 1889. Pay of employes.	\$1,410 00			
Mar. 18, 1887. Pay of employes.	18,900 00			
Mar. 4, 1889. Repairs to State Capitol, thirty-seventh, thirty-eighth, and thirty-ninth fiscal years.	6,436 78			
Mar. 18, 1887. Repairs to State Capitol	2,000 00			\$161 40
Mar. 11, 1889. Repairs to State Capitol	7,500 00			119 31
Mar. 18, 1887. Stationery, fuel, lights, for Legislature and State officers, thirty-ninth fiscal year	1,659 71			642 79
Mar. 8, 1889. Stationery, fuel, lights, etc., for Legislature and State officers	1,400 24			3 03
Mar. 18, 1887. Stationery, fuel, lights, etc., for Legislature and State officers	985 17			985 17
Mar. 18, 1887. Stationery, fuel, lights, etc., for Legislature and State officers	7,500 00			644 60
Mar. 8, 1889. Stationery, fuel, lights, etc., for Legislature and State officers	1,500 00			
Mar. 4, 1889. Water for irrigation, thirty-eighth fiscal year	40 98			
Mar. 18, 1887. Water for irrigation, purchase of hose, etc.	1,500 00			40 98
Mar. 18, 1887. Water for irrigation, purchase of hose, etc.	600 00			109 61
Mar. 18, 1887. Water for State Capitol	40,250 00			1,333 52
Mar. 16, 1889. Improvement of State Capitol grounds	17,920 00			150 00
Mar. 15, 1887. Construction granite steps, Capitol grounds	400 00			38,806 61
Mar. 15, 1887. Salary Policemen, Capitol grounds				17,732 32
Mar. 20, 1889. Salary Policemen, Capitol grounds				123 35
Amount carried forward.				
				53,417 76
				\$6,264,229 38

2,552,479 17

STATEMENT No. 3—Continued.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, 40th Fiscal Year.	Amount Expended during 40th Fiscal Year.	Amount Unexpended during 40th Fiscal Year.	Total Amount Expended during 40th Fiscal Year.
	Amount brought forward.....					\$6,264,229 38
	<i>Official Advertising.</i>					
Mar. 17, 1887.	For official advertising.....	\$221 05		\$85 00		
Mar. 17, 1887.	For official advertising.....		\$750 00	885 08	\$0 97	
Mar. 11, 1889.	For official advertising, thirty-eighth and fortieth fiscal years.....		3,882 40	3,826 85	55 55	
	<i>Rewards.</i>					4,798 93
Mar. 18, 1887.	Payment of rewards offered by the Governor.....	\$2,250 00		\$600 00	\$1,650 00	
Mar. 18, 1887.	Payment of rewards offered by the Governor.....		\$2,500 00	950 00	1,550 00	
Mar. 8, 1889.	Arrest and conviction of highway robbers, thirty-eighth fiscal year.....		456 00	456 00		
Mar. 18, 1887.	Arrest and conviction of highway robbers.....	1,600 00				
Mar. 18, 1887.	Arrest and conviction of highway robbers.....		2,500 00	2,500 00	1,600 00	
Mar. 8, 1889.	Arresting criminals outside limits of State, thirty-ninth fiscal year.....		1,788 39	1,651 84	137 05	
Mar. 18, 1887.	Arresting criminals outside limits of State.....		3,000 00	1,564 25	1,435 75	
	<i>Bonds.</i>					7,721 59
	Purchase of bonds for State School Fund.....					
	Redemption of bonds, issue Funded Debt Bonds of 1873.....			\$138,272 72		138,272 72
	Payment of interest on Funded Debt Bonds of 1873.....			52,000 00		52,000 00
	Interest on bonds for relief of Jas. Saultrey.....			239,820 00		239,820 00
	Redemption of Indian War Bonds of 1857, War Bond Fund.....			350 50		350 50
	<i>Estates of Deceased Persons.</i>			49 34		49 34
	Payment of costs.....					
	Payment to heirs of estate of Joseph Alge.....			\$465 73		
				926 15		
	Restitution of principal, land sold not the property of the State, State School Land Fund.....					1,391 88
	Restitution of interest, land sold not the property of the State, State School Fund.....			\$1,429 95		1,429 95
	Costs of annulment certificates of Purchase, State School Land Fund.....			1,327 06		1,327 06
				275 40		275 40
	<i>Bank Commissioners.</i>					
Mar. 10, 1887.	Salaries of Commissioners—Bank Commissioners' Fund.....		\$10,800 00	\$10,800 00		
Mar. 10, 1887.	Salary of Secretary—Bank Commissioners' Fund.....		1,800 00	1,800 00		
Mar. 10, 1887.	Traveling expenses.....	\$71 48		56 20	\$16 25	

Mar. 10, 1887.	Traveling expenses.....	75 00	1,500 00	1,077 25	422 75
Mar. 10, 1887.	Rent of office.....			75 00	
Mar. 10, 1887.	Rent of office.....		900 00	825 00	75 00
Mar. 10, 1887.	Stationery, fuel, and lights.....	41 79		27 45	18 09
Mar. 10, 1887.	Stationery, fuel, and lights.....		300 00	296 25	
-----	Railway taxes—County portion.....				
-----	Election rewards, payment of (from Election Reward Fund).....			\$370 661 21	
-----				300 00	
-----	<i>Miscellaneous.</i>				
Mar. 19, 1889.	Relief of Wilson DeLetta.....		\$4,000 00	\$4,000 00	
Mar. 19, 1889.	Purchase of "Cooke's School Entomology".....		15,000 00	15,000 00	
Mar. 19, 1889.	Claim of Marin County Waterworks.....		470 00	470 00	
Mar. 16, 1889.	Claim of John C. Edgar.....		140 00	140 00	
Mar. 5, 1889.	Claim of A. A. Bennett.....		25 00	25 00	
Feb. 28, 1889.	Claim of John A. Cole.....		116 55	116 55	
Feb. 28, 1889.	Claim of C. E. Hughes.....		131 50	131 50	
Mar. 1, 1889.	Claims of Trustees of Chico Normal School.....		503 00	503 00	
Feb. 28, 1889.	Claim of James Toubey.....		585 43	585 43	
Mar. 16, 1889.	Relief of James W. Mayberry.....		5,000 00	5,000 00	
Feb. 28, 1889.	Claim of Thomas W. O'Neil.....		1,970 00	1,970 00	
Mar. 25, 1889.	Claim of J. N. Vera.....		125 00	125 00	
Mar. 1, 1889.	Claim of William Gutenberger.....		495 00	495 00	
Mar. 1, 1889.	Claim of N. P. Cole.....		1,220 00	1,220 00	
Feb. 28, 1889.	Claim of J. J. Lynch.....		532 00	532 00	
Mar. 14, 1889.	Claim of Mrs. J. G. Lemmon.....		1,000 00	1,000 00	
Mar. 11, 1889.	Claim of E. M. Gallagher.....		4,240 85	4,240 85	
Mar. 1, 1889.	Claim of S. W. Ravelly.....		120 00	120 00	
Mar. 16, 1889.	Compensation to George R. B. Hayes.....		2,000 00	2,000 00	
Mar. 1, 1889.	Claim of W. E. Doan.....		150 00	150 00	
Mar. 5, 1889.	Claim of Ben. Cohen.....		118 00	118 00	
Mar. 1, 1889.	Claim of C. M. Bumbaugh.....		1,300 00	1,300 00	
Mar. 1, 1889.	Draping State Capitol at death of Governor Bartlett.....		288 35	288 35	
Jan. 31, 1889.	Expenses of funeral of Governor Bartlett.....		3,360 32	3,360 32	
Feb. 6, 1889.	Claim of N. P. Perine.....		6,624 00	6,624 00	
Mar. 5, 1889.	Claim of Col. W. B. Burtiss.....		708 35	708 35	
Mar. 15, 1889.	Claim of John Cravens.....		104 25	104 25	
Mar. 5, 1889.	Claim of William Pyburn.....		522 00	522 00	
Mar. 15, 1889.	Claim of I. G. Wickersham.....		1,775 50	1,775 50	
Mar. 16, 1889.	Claim of W. T. Beville.....		468 15	468 15	
Mar. 11, 1889.	Purchase of ballot paper.....		5,812 32	5,811 63	\$0 69
Mar. 18, 1887.	Purchase of ballot paper.....		4,000 00	3,999 60	40
Mar. 9, 1887.	Payment of certain creditors of the State.....	\$772 65		450 00	322 65
-----	Amount carried forward.....				
					\$7,007,583 11

14,957 15
370 661 21
300 00

STATEMENT No. 3—Continued.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, 40th Fiscal Year.	Amount Expended during 40th Fiscal Year.	Amount Unexpended during 40th Fiscal Year.	Total Amount Expended during 40th Fiscal Year.
Mar. 8, 1887.	Amount brought forward.					\$7,097,583 11
Mar. 11, 1889.	Erection of monument to memory of J. W. Marshall		\$5,000 00	\$4,500 00	\$500 00	
Mar. 11, 1889.	Improvement of grounds, Marshall monument		4,000 00	1,221 80	2,778 20	
Mar. 18, 1887.	Rent of rooms, Hastings College of Law	\$300 00		300 00		
Mar. 18, 1887.	Rent of rooms, Hastings College of Law		1,200 00	1,100 00	100 00	
Mar. 18, 1887.	Payment of interest to Hastings College of Law	7,000 00		7,000 00		
Mar. 18, 1887.	Payment of interest to Hastings College of Law		7,000 00	3,500 00	3,500 00	
Mar. 18, 1887.	Care of State Burial Grounds.	31 00		6 00	25 00	
Mar. 18, 1887.	Care of State Burial Grounds.		100 00	89 00	11 00	
Mar. 11, 1889.	Investigating State Prisons.		10,000 00	2,542 55	7,457 45	
Mar. 11, 1889.	Naming minerals, State Mineral Cabinet.		50 00	50 00		
Mar. 11, 1889.	Preparing catalogue, State Mineral Cabinet		150 00	150 00		
Mar. 11, 1889.	Glass covers, State Mineral Cabinet		150 00	150 00		
Feb. 13, 1889.	Employing counsel defending Scott Exclusion Act.		6,500 00	6,500 00		
Mar. 16, 1889.	Payment of drainage claims.		49,294 55	36,196 55	13,098 00	
Mar. 12, 1887.	Mileage Presidential Electors.		500 00	249 20	250 80	
	Total expenditures					128,909 58
						\$7,224,492 69

STATEMENT No. 3—Continued.

Recapitulation of Expenditures for the Fortieth Fiscal Year, ending June 30, 1889.

FOR WHAT PURPOSE EXPENDED.	Amount.
Legislative Department.....	\$188,823 75
Judicial Department.....	240,779 60
Executive Department.....	17,155 98
Secretary of State's office.....	12,879 95
Controller's office.....	16,666 69
Treasurer's office.....	9,992 05
Attorney-General's office.....	8,665 25
Surveyor-General's office.....	14,235 33
Office of Superintendent of Public Instruction.....	12,938 19
State Library.....	20,824 36
Expenses of National Guard.....	118,167 13
State Printing Office.....	257,750 79
State Engineer's Department.....	10,977 60
State Board of Health.....	4,500 47
State Board of Equalization.....	18,705 44
Railroad Commissioners.....	20,093 95
Insurance Commissioner.....	6,273 45
Commissioners of Yosemite Valley.....	14,955 20
Forestry Commissioners.....	16,744 85
Fish Commissioners.....	16,842 08
State Mining Bureau.....	36,563 51
Bureau Labor Statistics.....	5,580 05
State Board of Horticulture.....	12,414 56
State Board of Viticulture.....	20,379 66
State Board of Silk Culture.....	2,213 83
Deaf, Dumb, and Blind Asylum.....	48,304 99
Home for Adult Blind.....	35,299 74
Asylum for Insane at Stockton.....	269,006 77
Asylum for Insane at Napa.....	227,287 57
Asylum for Insane at Agnews.....	306,408 56
Home Feeble-Minded Children.....	40,522 93
Transportation of insane.....	34,732 98
State Prison at San Quentin.....	366,875 66
State Prison at Folsom.....	114,700 39
Reform School for Juvenile Offenders.....	8,324 36
Transportation of prisoners.....	27,730 08
Improvements of wharves and docks, San Francisco.....	259,614 05
Support of orphans, etc.....	225,831 87
Support of aged persons, etc.....	210,028 08
Aid to Veterans' Home.....	32,637 99
Aid to Agricultural Societies.....	54,007 50
State Board of Education.....	380 45
State University.....	175,635 01
State Normal School at San José.....	41,099 91
State Normal School at Los Angeles.....	22,148 25
State Normal School at Chico.....	57,631 59
Support of common schools.....	2,552,479 17
State Capitol building and grounds.....	53,417 76
Official advertising.....	4,796 93
Rewards, arrest of criminals.....	7,721 59
Purchase of bonds for School Fund.....	138,272 72
Redemption of Bonds of 1873.....	52,000 00
Redemption of Indian War Bonds of 1857.....	49 34
Payment of interest, Bonds of 1873.....	239,820 00
Payment of interest on Saultry Relief Bonds.....	350 50
Estates of deceased persons.....	1,391 88
Restitution of principal, land sold not property of the State.....	1,429 95
Restitution of interest, land sold not property of the State.....	1,327 06
Costs, annulment certificates of purchase.....	275 40
Bank Commissioners.....	14,957 15
Railway taxes, county portion.....	370,661 21
Election rewards.....	300 00
Miscellaneous.....	126,909 58
Total.....	\$7,224,492 69

STATEMENT No. 4.

EXPENDITURES FOR FORTY-FIRST FISCAL YEAR.

Statement of the Amount of each Appropriation, the Amount Expended, and the Total Expenditures during the Fiscal Year ending June 30, 1890.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, 41st Fiscal Year.	Amount Expended during 41st Fiscal Year.	Amount Unexpended during 41st Fiscal Year.	Total Amount Expended during 41st Fiscal Year.
<i>Judicial Department.</i>						
Mar. 21, 1889.	State's portion salaries Judges of Superior Court.	-----	\$137,500 00	\$132,833 33		
Mar. 21, 1889.	Salaries Judges Supreme Court.	-----	42,000 00	42,000 00		\$4,686 67
Mar. 21, 1889.	Salary Clerk Supreme Court.	-----	3,000 00	3,000 00		
Mar. 21, 1889.	Salaries Deputy Clerks Supreme Court.	-----	9,000 00	9,000 00		
Mar. 21, 1889.	Pay of Porter, office Clerk Supreme Court.	-----	480 00	480 00		
Mar. 18, 1889.	Postage and expressage, office Clerk Supreme Court.	-----		69 85	22 20	
Mar. 21, 1889.	Postage and expressage, office Clerk Supreme Court.	\$92 05		302 05	47 95	
Mar. 21, 1889.	Salary Reporter of Decisions Supreme Court.	-----	350 00			
Mar. 21, 1889.	Salary Deputy Reporter of Decisions Supreme Court.	-----	2,500 00	2,500 00		
Mar. 21, 1889.	Salaries Secretaries to Justices Supreme Court.	-----	2,400 00	2,400 00		
Mar. 21, 1889.	Salaries of Bailiffs Supreme Court.	-----	4,800 00	4,800 00		
Mar. 21, 1889.	Salaries Phonographic Reporter Supreme Court.	-----	3,000 00	3,000 00		
Mar. 21, 1889.	Postage and contingent expenses Supreme Court.	-----	3,000 00	3,000 00		
Mar. 21, 1889.	Expenses under Sec. 47, C. of C. P.	-----	250 00	249 75	25	
Mar. 18, 1887.	Expenses under Sec. 47, C. of C. P.	1,288 44		1,288 44		
Mar. 21, 1889.	Salaries Supreme Court Commissioners.	-----	19,000 00	17,359 46	1,640 54	
Feb. 15, 1889.	Salary Secretary to Supreme Court Commissioners.	-----	30,000 00	30,000 00		
Feb. 15, 1889.	Rent of chambers Supreme Court Commissioners.	-----	2,400 00	2,400 00		
Mar. 18, 1887.	Rent of chambers Supreme Court Commissioners.	125 00		125 00		
Mar. 21, 1889.	Furnishing rooms, etc., Supreme Court Commissioners.	-----	2,100 00	1,925 00	175 00	
Mar. 21, 1889.	Postage, etc., of Secretary Supreme Court Commissioners.	-----	1,500 00	1,130 21	369 79	
Mar. 21, 1889.	Support Supreme Court Library (from fees)	-----	100 00	100 00		
				1,536 75		
<i>Executive Department.</i>						
Mar. 21, 1889.	Salary of Governor.	-----	\$6,000 00	\$6,000 00		
Mar. 21, 1889.	Salary of Private Secretary of Governor.	-----	4,000 00	4,000 00		
Mar. 21, 1889.	Salary of Executive Secretary of Governor.	-----	2,000 00	2,000 00		
Mar. 21, 1889.	Pay of Porter, office of Governor.	-----	1,080 00	1,080 00		
Mar. 21, 1889.	Special (contingent Fund (secret service) of Governor.	-----	2,500 00	2,485 45	\$14 55	
Mar. 21, 1889.	Postage and expressage, office of Governor.	-----	1,000 00		100 90	
Mar. 21, 1889.	Salary Secretary State Board of Examiners.	-----	1,800 00	1,800 00		
Mar. 18, 1887.	Postage and expressage State Board of Examiners.	\$19 02		19 02		
						\$259,499 84

Mar. 21, 1889.	Postage and expressage State Board of Examiners.	-----	100 00	78 54	21 46	18,362 11
	<i>Secretary of State.</i>					
Mar. 21, 1889.	Salary of Secretary of State	-----	\$3,000 00	\$3,000 00		
Mar. 21, 1889.	Salary of Deputy Secretary of State	-----	2,400 00	2,400 00		
Mar. 21, 1889.	Salary of Bookkeeper of Secretary of State	-----	2,000 00	2,000 00		
Mar. 21, 1889.	Salary of Clerks of Secretary of State	-----	4,800 00	4,800 00		
Mar. 21, 1889.	Pay of Porter of office of Secretary of State	-----	480 00	480 00		
Mar. 18, 1887.	Postage and expressage of Secretary of State	-----			\$0 78	
Mar. 21, 1889.	Postage and expressage of Secretary of State	-----	2,000 00	982 55	1,017 45	
Mar. 18, 1887.	Contingent and traveling expenses of Secretary of State	-----		14 25	4 60	
Mar. 21, 1887.	Contingent and traveling expenses of Secretary of State	-----	250 00	205 45	44 55	
	<i>State Controller.</i>					13,918 51
Mar. 21, 1889.	Salary of Controller	-----	\$3,000 00	\$3,000 00		
Mar. 21, 1889.	Salary of Deputy Controller	-----	2,400 00	2,400 00		
Mar. 21, 1889.	Salary of Bookkeeper of Controller	-----	2,000 00	2,000 00		
Mar. 21, 1889.	Salary of Clerks of Controller	-----	8,000 00	7,982 25	\$17 75	
Mar. 21, 1889.	Pay of Porter, office of Controller	-----	480 00	480 00		
Mar. 18, 1887.	Postage and expressage of Controller	-----			36 28	
Mar. 21, 1889.	Postage and expressage of Controller	-----	500 00	373 26	126 74	
Mar. 18, 1887.	Traveling and contingent expenses of Controller	-----		5 00	189 20	
Mar. 21, 1889.	Traveling and contingent expenses of Controller	-----	750 00	246 20	503 80	
	<i>State Treasurer.</i>					16,522 99
Mar. 21, 1889.	Salary State Treasurer	-----	\$3,000 00	\$3,000 00		
Mar. 21, 1889.	Salary Deputy State Treasurer	-----	2,400 00	2,400 00		
Mar. 21, 1889.	Salary Bookkeeper State Treasurer	-----	2,000 00	2,000 00		
Mar. 21, 1889.	Salary Clerk State Treasurer, from January to July	-----	800 00	800 00		
Mar. 21, 1889.	Salary Watchmen, office State Treasurer	-----	2,400 00	2,400 00		
Mar. 21, 1889.	Pay of Porter, office of State Treasurer	-----	480 00	480 00		
Mar. 21, 1889.	Postage and expressage of State Treasurer	-----	300 00	227 45	\$72 55	
	<i>Attorney-General.</i>					11,307 45
Mar. 21, 1889.	Salary of Attorney-General	-----	\$3,000 00	\$3,000 00		
Mar. 21, 1889.	Salary of Deputy Attorney-General	-----	2,400 00	2,400 00		
Mar. 21, 1889.	Salary of Clerk of Attorney-General	-----	1,600 00	1,600 00		
Mar. 21, 1889.	Pay of Porter, office of Attorney-General	-----	480 00	480 00		
Mar. 21, 1889.	Postage and expressage of Attorney-General	-----	250 00	234 79	\$15 21	
Mar. 18, 1887.	Traveling expenses of Attorney-General	-----		7 00	678 50	
Mar. 21, 1889.	Traveling expenses of Attorney-General	-----	500 00	360 05	139 95	
Mar. 18, 1887.	Costs and expenses of suits, State a party in interest	-----		1,252 45	321 06	
Mar. 21, 1889.	Costs and expenses of suits, State a party in interest	-----	3,500 00	2,896 75	603 25	
	Amount carried forward	-----				\$319,610 90

STATEMENT No. 4—Continued.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, first Fiscal Year.	Amount Expended during first Fiscal Year.	Amount Unexpended during first Fiscal Year.	Total Amount Expended during first Fiscal Year.
Mar. 15, 1887. Mar. 21, 1889.	Amount brought forward. Costs and expenses of suits before United States Court Costs and expenses of suits before United States Court	\$787 22	\$2,500 00	\$500 00 2,500 00	\$187 22	\$319,610 90
Mar. 21, 1889.	<i>Surveyor-General.</i>					15,331 04
Mar. 21, 1889.	Salary Surveyor-General		\$3,000 00	\$3,000 00		
Mar. 21, 1889.	Salary Deputy Surveyor-General		2,400 00	2,400 00		
Mar. 21, 1889.	Salaries Clerks Surveyor-General		6,400 00	6,400 00		
Mar. 21, 1889.	Pay of Porter		480 00	480 00		
Mar. 21, 1889.	Postage and expressage		400 00	330 59	\$69 41	
Mar. 18, 1887.	Contingent expenses	\$21 40		3 90	17 50	
Mar. 21, 1889.	Contingent expenses		250 00	81 65	168 35	
Mar. 21, 1889.	Purchase and copying maps		1,000 00	153 00	847 00	
Mar. 21, 1889.	Traveling expense in conjunction with Attorney-General		500 00	420 50	79 50	
Mar. 21, 1889.	<i>Superintendent of Public Instruction.</i>					13,269 64
Mar. 21, 1889.	Salary Superintendent		\$3,000 00	\$3,000 00		
Mar. 21, 1889.	Salary Deputy Superintendent		2,400 00	2,400 00		
Mar. 21, 1889.	Salary Clerk of Superintendent		1,600 00	1,555 25	\$44 75	
Mar. 1, 1889.	Salary additional Clerk	\$133 35		133 35		
Mar. 21, 1889.	Salary additional Clerk		1,600 00	1,466 30	133 70	
Mar. 21, 1889.	Pay of Porter		480 00	480 00		
Mar. 18, 1887.	Postage and expressage, office	6 96		2 40	4 56	
Mar. 21, 1889.	Postage and expressage, office		1,000 00	941 78	58 22	
Mar. 18, 1887.	Contingent expenses, office	24 78		24 10	68 68	
Mar. 21, 1889.	Contingent expenses, office		150 00	88 15	61 85	
Mar. 18, 1887.	Traveling expenses	367 45		64 15	303 30	
Mar. 21, 1889.	Traveling expenses		1,500 00	1,176 00	324 00	
Mar. 21, 1889.	<i>State Library.</i>					11,331 48
Mar. 21, 1889.	Salary of Librarian		\$3,000 00	\$3,000 00		
Mar. 21, 1889.	Salary of Deputy Librarians		3,600 00	3,600 00		
Mar. 21, 1889.	Pay of Porter		900 00	900 00		
Mar. 18, 1887.	Postage and expressage			9 00	\$1 88	
Mar. 21, 1889.	Postage and expressage	\$10 88				
Mar. 5, 1890.	By money returned by Trustees		200 00	210 09		
	Support of (from State Library Fund)		10 09	44,779 30		
						52,408 39

STATEMENT No. 4—Continued.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, 41st Fiscal Year.	Amount Expended during 41st Fiscal Year.	Amount Expended during 41st Fiscal Year.	Total Amount Expended during 41st Fiscal Year.
	<i>Amount brought forward.</i>					\$688,561 45
Mar. 18, 1887.	Target practice expenses, N. G. C.	\$430 78		\$429 00	\$1 78	
Mar. 21, 1889.	Target practice expenses, N. G. C.		\$3,500 00	2,541 20	958 80	
Mar. 21, 1889.	Purchase of uniforms for new companies.		28,000 00	27,365 86	634 14	
Mar. 21, 1889.	Purchase of uniforms for old companies.		22,000 00	9,814 30	12,185 70	
Mar. 18, 1887.	Purchase of uniforms for fortieth fiscal year.	4,467 68		4,467 68		
Mar. 21, 1889.	Expenses of encampment, N. G. C.		26,000 00	19,922 50	6,077 50	
Mar. 21, 1889.	Horse equipments, San Francisco Hussars.		300 00	300 00		
Mar. 16, 1889.	Reimbursement, Company C, Sixth Infantry.		1,764 00	1,764 00		
Mar. 21, 1889.	Equipment, Signal Corps.		1,000 00	202 40	797 60	
	<i>Railroad Commissioners.</i>					176,523 04
Mar. 21, 1889.	Salaries of members.		\$12,000 00	\$12,000 00		
Mar. 21, 1889.	Salary of Secretary.		2,400 00	2,400 00		
Mar. 21, 1889.	Salary of Bailiff.		1,200 00	1,200 00		
Mar. 18, 1887.	Office rent.	\$75 00		75 00		
Mar. 21, 1889.	Office rent.		900 00	825 00	\$75 00	
Mar. 18, 1887.	Stationery, fuel, light, etc.	107 30		107 30	37 06	
Mar. 21, 1889.	Stationery, fuel, light, etc.		500 00	462 96	37 06	
Mar. 21, 1889.	Traveling expenses.		250 00	60 75	189 25	
Mar. 21, 1889.	Salary of Stenographer.	133 40		133 40		
	<i>Insurance Commissioner.</i>					17,264 40
Mar. 21, 1889.	Salary of Insurance Commissioner.		\$3,000 00	\$3,000 00		
Mar. 21, 1889.	Salary of Deputy Insurance Commissioner.		1,800 00	1,800 00		
Mar. 4, 1887.	Rent and contingent expenses, from Insurance Fund.	\$644 55		130 96	\$513 60	
Mar. 4, 1887.	Rent and contingent expenses, from Insurance Fund.		2,000 00	1,241 40	758 60	
	<i>Yosemite Valley and Mariposa Big Tree Grove.</i>					6,172 35
Mar. 21, 1889.	Salary of Guardian.		\$1,500 00	\$1,500 00		
Mar. 21, 1889.	Care of Yosemite Valley.		10,000 00	10,000 00		
Mar. 21, 1889.	Care of Mariposa Big Tree Grove.		2,600 00	2,380 15	\$119 85	
Mar. 11, 1889.	Traveling expenses for thirty-eighth fiscal year.		133 93	137 07	6 86	
Mar. 14, 1886.	Purchase of certain roads and leases.		14,000 00	14,000 00		
	Maintenance of valley, from Yosemite Valley Fund.			3,301 15		
	<i>Fish Commissioners.</i>					31,328 97
ar. 18, 1887.	Restoration and preservation of fish in waters of the State.	\$23 63		\$23 53		

Mar. 21, 1889.	Restoration and preservation of fish in waters of the State.				\$5,000 00	4,997 75	\$2 27
Mar. 19, 1889.	Restoration and preservation of fish, thirty-sixth, thirty-seventh, and thirty-eighth fiscal years.	977 15				466 06	510 49
Mar. 18, 1887.	Support of State Hatcheries.	36 04				35 75	29
Mar. 21, 1887.	Support of State Hatcheries.				5,000 00	4,882 53	117 47
Mar. 5, 1889.	Removal of obstructions to free passage of fish in American River.				500 00	5,500 00	
Mar. 1, 1889.	Propagation of fish, from Fish Commissioners' Fund.					5,283 33	
Mar. 4, 1889.	Violation of fish laws.	231 20				222 61	8 59
Mar. 21, 1889.	Violation of fish laws.				1,500 00	1,500 00	
Mar. 16, 1889.	Importation of game birds, etc.				2,000 00	503 84	1,496 16
	<i>Forestry Commission.</i>						18,415 98
April 1, 1889.	Uses of State Board.	\$28,215 68				\$17,871 82	\$10,343 86
	<i>State Mining Bureau.</i>						17,871 82
Mar. 14, 1889.	Support of.				\$15,000 00	\$15,000 00	
Mar. 14, 1889.	Geological field work.				35,000 00	30,356 78	\$4,643 22
Mar. 14, 1889.	Establishment and maintenance, from Mining Bureau Fund.				5,727 03		
	<i>Bureau of Labor Statistics.</i>						51,083 81
Mar. 21, 1889.	Salary of Commissioner.				\$3,000 00	\$3,000 00	
Mar. 21, 1889.	Salary of Deputy Commissioner.				1,800 00	1,800 00	
Mar. 21, 1889.	Office rent.				600 00	550 00	\$50 00
	<i>State Board of Horticulture.</i>						5,350 00
Mar. 21, 1889.	Salary of Secretary.				\$2,100 00	\$2,100 00	
Mar. 21, 1889.	Salary of Clerk to Secretary.				600 00	600 00	
Mar. 21, 1889.	Salary of Quarantine Clerk.				2,100 00	2,100 00	
Mar. 21, 1889.	Uses of Board.				12,500 00	12,498 08	\$1 92
Mar. 18, 1889.	Uses of Board.	\$52 73				52 73	
	<i>State Board of Viticulture.</i>						17,350 81
Mar. 18, 1887.	Uses of Board.	\$2,053 57				\$1,883 60	\$169 97
Mar. 21, 1889.	Uses of Board.				\$17,500 00	16,388 92	1,111 08
	<i>State Board of Silk Culture.</i>						18,272 52
Mar. 18, 1887.	Support of.	\$493 22				\$369 90	\$123 32
	<i>Deaf, Dumb, and Blind Asylum.</i>						369 90
Mar. 18, 1887.	Support of asylum.	\$1,466 72				\$1,466 72	
Mar. 21, 1889.	Support of asylum.				\$45,750 00	42,354 76	\$3,395 24
Mar. 21, 1889.	Furnishing school house.				1,000 00	781 95	218 05
Mar. 21, 1889.	For articulation department.				2,000 00	1,687 50	312 50
	Amount carried forward.						\$1,053,564 45

STATEMENT No. 4—Continued.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, fiscal Year.	Amount Expended during 41st Fiscal Year.	Amount Unexpended during 41st Fiscal Year.	Total Amount Expended during 41st Fiscal Year.
Mar. 21, 1889.	Amount brought forward.....		\$1,500 00	\$1,480 12	\$19 88	\$1,053,564 45
Mar. 4, 1887.	For industrial department.....			44,106 68	16 37	
Mar. 16, 1889.	Completing educational building.....	\$29,123 05	15,000 00	29,322 64	20,677 36	
Mar. 16, 1889.	Erection of girls' home.....		50,000 00	2,826 28	7,173 72	
Mar. 16, 1889.	Developing water supply.....		10,000 00	2,000 00		
Mar. 16, 1889.	New steam boiler, etc.....		2,000 00	717 05	282 95	
Mar. 16, 1889.	Painting buildings.....		1,000 00	1,000 00		
Mar. 16, 1889.	Purchase of electric light plant.....		1,000 00		310 00	
Mar. 16, 1889.	Purchase of type writers.....		500 00	38 50		
Mar. 4, 1887.	Erection of hot house.....	38 50		152 25	656 75	128,124 45
Mar. 4, 1887.	Grading, etc., streets.....	809 00				
	<i>Home for Adult Blind.</i>					
Mar. 21, 1889.	Support of (from General Fund).....		\$25,000 00	\$23,046 48	\$1,953 52	
Mar. 7, 1889.	Erecting dormitories.....		10,500 00	5,400 20	5,099 80	
Mar. 7, 1889.	Erecting residence for Superintendent.....		2,500 00	2,485 45	14 55	
Mar. 7, 1889.	Enlarging dining-room.....		2,500 00	2,500 00		
	Support of (from Adult Blind Fund).....			19,989 94		53,422 07
	<i>Asylums for Insane.</i>					
Mar. 18, 1887.	Support Asylum at Stockton.....	\$4,909 44	\$215,000 00	\$4,909 44		
Mar. 21, 1889.	Support Asylum at Stockton.....		29,750 00	21,900 38	\$7,675 81	
Mar. 14, 1889.	Furnishing boiler house, etc.....		50,500 00	41,735 26	8,764 74	
Mar. 15, 1889.	Erection new buildings, etc.....		40,000 00	8,117 10	31,882 90	
Mar. 16, 1889.	Supplying water, light, etc.....	25,388 34		9,582 92	15,805 42	
Mar. 12, 1887.	Construction of open canal.....					
Mar. 18, 1887.	Support Asylum at Napa.....	\$22,533 49	\$204,400 00	\$17,597 90	\$4,935 59	293,569 29
Mar. 21, 1889.	Support Asylum at Napa.....			178,260 21	26,139 79	
Mar. 16, 1889.	New flooring, etc.....	715 31	2,000 00	715 31		
Mar. 16, 1889.	Improvement of gas works.....		25,000 00	2,000 00		
Mar. 16, 1889.	Erection of infirmaries.....			18,297 84	6,702 16	
Mar. 18, 1887.	Support of Asylum at Agnews.....	\$51,730 83		\$10,179 89	\$41,550 94	216,871 26
Mar. 21, 1889.	Support of Asylum at Agnews.....		\$100,000 00	85,062 11	14,937 89	
Mar. 21, 1889.	Furnishing three ward buildings.....		10,000 00	7,557 60	2,442 40	
Mar. 21, 1889.	Heating buildings.....		10,000 00	9,815 25	184 75	

Mar. 21, 1889.	Lighting buildings.....	25,000 00	431 12	24,568 88	
Mar. 21, 1889.	Purchase of live stock.....	3,000 00	2,406 15	593 85	
Mar. 14, 1889.	Erection of administration building.....	125,000 00	66,646 43	58,353 57	
Mar. 14, 1889.	Erection of additional ward building.....	80,000 00	44,007 40	35,992 60	
Mar. 4, 1887.	Erection of additional buildings.....	-----	7,848 61	66	
Mar. 14, 1889.	Furnishing buildings, fortieth fiscal year.....	-----	1,821 19	500 19	235,775 75
	<i>Insane Asylum in Southern California.</i>				
Mar. 11, 1889.	Purchase of site and erection of building (transfer from General Fund).....	\$350,000 00	\$115,000 00	\$235,000 00	115,000 00
	<i>Home for Feeble-Minded Children.</i>				
Mar. 18, 1887.	Support of Home.....	-----	\$8,073 35	\$3,099 06	\$4,974 29
Mar. 21, 1889.	Support of Home.....	-----	-----	35,367 17	5,132 83
Mar. 8, 1887.	Permanent improvements.....	\$40,500 00	4,473 51	1,343 54	3,129 97
Mar. 14, 1889.	Water supply and sewerage, improvement of grounds.....	15,000 00	-----	111 78	14,888 22
Mar. 6, 1889.	Purchase of a site and erection of building.....	170,000 00	-----	51,996 50	118,003 50
Mar. 14, 1889.	Furnishing Home.....	15,000 00	-----	2,854 33	12,145 67
	<i>Transportation of Insane.</i>				94,772 38
Mar. 18, 1887.	Transportation of insane.....	-----	\$3,319 15	\$1,774 55	\$1,544 60
Mar. 14, 1889.	Transportation of insane.....	\$30,000 00	-----	19,686 65	10,311 35
	<i>State Prisons.</i>				21,463 20
Mar. 21, 1889.	Support of San Quentin State Prison (General Fund).....	\$165,000 00	-----	\$159,118 19	\$5,881 81
Mar. 21, 1889.	Repairing front building offices.....	10,000 00	-----	2,920 32	7,079 68
Mar. 19, 1887.	Building lower gate guards' quarters.....	1,000 00	-----	875 74	124 26
Mar. 19, 1887.	Roof for cell buildings.....	4,000 00	-----	3,601 12	398 88
-----	Use of prison (from Prison Fund).....	-----	-----	111,572 90	-----
-----	Purchase of jute (from Jute Revolving Fund).....	-----	-----	150,054 89	-----
Mar. 18, 1887.	Support Folsom State Prison.....	-----	\$28,548 04	\$19,537 50	\$9,010 54
Mar. 21, 1889.	Support Folsom State Prison.....	\$110,000 00	-----	99,163 17	10,836 83
Mar. 11, 1889.	Purchase electric plant, etc.....	112,500 00	-----	20,689 25	91,800 75
	<i>Establishing Preston School of Industry.</i>	\$160,000 00	-----	\$4,596 50	\$155,403 50
Mar. 11, 1889.	Erection, equipment, and maintenance Juvenile Reform School.....	-----	\$196,675 64	\$100,485 38	\$96,190 26
	<i>Transportation of Prisoners.</i>				100,485 38
Mar. 18, 1887.	Transportation of prisoners.....	-----	\$5,153 76	\$1,850 35	\$3,303 41
Mar. 21, 1889.	Transportation of prisoners.....	\$27,500 00	-----	18,760 90	8,739 10
	Amount carried forward.....	-----	-----	-----	20,611 25
					\$2,905,799 06

STATEMENT No. 4--Continued.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, 41st Fiscal Year.	Amount Expended during 41st Fiscal Year.	Amount Unexpended during 41st Fiscal Year.	Total Amount Expended during 41st Fiscal Year.
	Amount brought forward-----					\$2,905,799 06
	<i>Orphan Asylums.</i>					
Mar. 25, 1880.	Support orphans for last half fortieth fiscal year-----			\$123,596 94		
Mar. 25, 1880.	Support orphans for first half fortieth fiscal year-----			122,801 55		
Mar. 25, 1880.	Support orphans for thirty-eighth fiscal year, paid in forty-first-----			1,496 17		
Mar. 25, 1880.	Support orphans for thirty-ninth fiscal year, paid in forty-first-----			2,622 21		
	<i>Aged Persons in Indigent Circumstances.</i>					250,516 87
Mar. 15, 1883.	Support of for thirty-fifth, paid in forty-first fiscal year-----			\$1,140 40		
Mar. 15, 1883.	Support of for thirty-sixth, paid in forty-first fiscal year-----			1,721 21		
Mar. 15, 1883.	Support of for thirty-seventh, paid in forty-first fiscal year-----			3,014 36		
Mar. 15, 1883.	Support of for thirty-eighth, paid in forty-first fiscal year-----			3,390 10		
Mar. 15, 1883.	Support of for thirty-ninth, paid in forty-first fiscal year-----			11,682 47		
Mar. 15, 1883.	Support of for fortieth, paid in forty-first fiscal year-----			105,468 90		
Mar. 15, 1883.	Support of for forty-first, paid in forty-first fiscal year-----			88,148 83		
	<i>Veterans' Home.</i>					214,566 27
Mar. 7, 1883.	Aid to-----			\$27,516 22		
	<i>Agricultural Societies.</i>					27,516 22
	Aid to State Agricultural Society-----					
	Aid to District Society No. 1-----		\$17,500 00	\$17,500 00		
	Aid to District Society No. 2-----		3,500 00	3,500 00		
	Aid to District Society No. 3-----		3,500 00	3,500 00		
	Aid to District Society No. 4-----		3,000 00	3,000 00		
	Aid to District Society No. 5-----		3,000 00	3,000 00		
	Aid to District Society No. 6-----		3,000 00	3,000 00		
	Aid to District Society No. 7-----		3,500 00	3,500 00		
	Aid to District Society No. 8-----		2,000 00	2,000 00		
	Aid to District Society No. 9-----		2,000 00	1,994 10	\$5 90	
	Aid to District Society No. 10-----		2,250 00	2,250 00		
	Aid to District Society No. 11-----		2,250 00	2,250 00		
	Aid to District Society No. 12-----		2,500 00	2,500 00		
	Aid to District Society No. 13-----		2,500 00	2,500 00		
	Aid to District Society No. 14-----		3,000 00	2,444 50	550 50	
	Aid to District Society No. 15-----		2,000 00	2,000 00		
			2,500 00	2,500 00		

Aid to District Society No. 16.....	2,250 00	2,250 00	2,250 00	68 77	87,520 01
Aid to District Society No. 17.....	2,000 00	2,000 00	2,000 00		
Aid to District Society No. 18.....	3,000 00	2,933 23	2,933 23		
Aid to District Society No. 19.....	2,500 00	2,500 00	2,500 00		
Aid to District Society No. 20.....	2,250 00	2,250 00	2,250 00		
Aid to District Society No. 21.....	2,500 00	2,500 00	2,500 00		
Aid to District Society No. 22.....	2,000 00	2,000 00	2,000 00		
Aid to District Society No. 23.....	1,750 00	1,672 45	1,672 45	77 55	
Aid to District Society No. 24.....	1,500 00	1,500 00	1,500 00		
Aid to District Society No. 25.....	3,000 00	3,000 00	3,000 00		
Aid to District Society No. 26.....	3,000 00	3,000 00	3,000 00		
Aid to District Society No. 27.....	2,250 00	2,225 73	2,225 73	24 27	
Aid to District Society No. 28.....	2,250 00	2,250 00	2,250 00		
<i>State Board of Education.</i>					
Traveling expenses of Board.....		\$375 00	\$251 15	\$123 85	251 15
<i>State University.</i>					
Support of (from ad valorem tax).....			\$101,205 89		
Support of (from University Fund).....			62,834 07		
Investment of proceeds from redemption of bonds.....			2,000 00		166,039 96
<i>State Normal Schools.</i>					
Support of Normal School at San José.....	\$1,505 39		\$1,505 39		
Support of Normal School at San José.....	439 66	\$39,000 00	36,020 56	\$2,979 44	
Use of library.....		1,000 00	439 66		
Use of library.....		750 00	958 62	41 38	
Painting roof.....		1,500 00	750 00		
Care of grounds.....		6,400 00	1,500 00		
Constructing sidewalks.....			6,394 65	5 35	
Support of Normal School at Los Angeles.....		\$21,000 00	\$18,039 83	\$2,960 17	47,568 88
Use of library.....		500 00	348 99	151 01	
Care of grounds.....		750 00	689 25	60 75	
Improvement of grounds.....		500 00	499 92	08	
Constructing gymnasium.....		10,000 00	7,359 89	2,640 11	
Support of Normal School at Chico.....		\$13,500 00	\$10,700 75	\$2,799 25	26,937 83
Use of library.....		1,000 00	902 12	88	
Constructing and completing building.....	\$11,662 73		11,662 73		
Furnishing building.....		10,000 00	9,945 38	54 62	
Amount carried forward.....					\$3,760,017 23

STATEMENT No. 4—Continued.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, 41st Fiscal Year.	Amount expended during 41st Fiscal Year.	Amount Unexpended during 41st Fiscal Year.	Total Amount Expended during 41st Fiscal Year.
	Amount brought forward.....					\$3,760,017 28
	<i>Support of Common Schools.</i>					
	Paid Alameda County.....			\$210,042 70		
	Paid Alpine County.....			816 88		
	Paid Amador County.....			27,293 90		
	Paid Butte County.....			40,129 10		
	Paid Calaveras County.....			23,149 20		
	Paid Colusa County.....			31,438 60		
	Paid Contra Costa County.....			32,852 00		
	Paid Del Norte County.....			4,622 20		
	Paid El Dorado County.....			21,286 95		
	Paid Fresno County.....			61,473 35		
	Paid Humboldt County.....			56,239 95		
	Paid Inyo County.....			5,667 54		
	Paid Kern County.....			17,027 65		
	Paid Lake County.....			18,068 60		
	Paid Lassen County.....			9,664 60		
	Paid Los Angeles County.....			285,480 45		
	Paid Marin County.....			24,161 50		
	Paid Mariposa County.....			9,206 20		
	Paid Mendocino County.....			41,112 75		
	Paid Merced County.....			15,442 35		
	Paid Modoc County.....			13,561 00		
	Paid Mono County.....			2,893 65		
	Paid Monterey County.....			43,146 90		
	Paid Napa County.....			33,577 80		
	Paid Nevada County.....			40,768 95		
	Paid Placer County.....			28,697 75		
	Paid Plumas County.....			9,854 66		
	Paid Sacramento County.....			70,832 35		
	Paid San Benito County.....			19,071 35		
	Paid San Bernardino County.....			57,204 50		
	Paid San Diego County.....			79,446 45		
	Paid San Francisco County.....			579,131 10		
	Paid San Joaquin County.....			59,572 90		
	Paid San Luis Obispo County.....			42,039 10		
	Paid San Mateo County.....			23,789 05		

Paid Santa Barbara County	42,784 00		
Paid Santa Clara County	113,196 15		
Paid Santa Cruz County	44,283 35		
Paid Shasta County	30,903 80		
Paid Sierra County	11,872 33		
Paid Siskiyou County	25,498 50		
Paid Solano County	42,745 80		
Paid Sonoma County	81,432 85		
Paid Stanislaus County	22,690 80		
Paid Sutter County	12,500 95		
Paid Tehama County	25,956 90		
Paid Trinity County	7,229 35		
Paid Tulare County	57,901 65		
Paid Tuolumne County	15,241 80		
Paid Ventura County	41,881 20		
Paid Yolo County	32,546 40		
Paid Yuba County	21,076 85		
<i>Support of Grammar Schools.</i>			
Paid Alameda County	\$342 00		
Paid Amador County	411 00		
Paid Butte County	495 00		
Paid Colusa County	234 00		
Paid Contra Costa County	39 00		
Paid Los Angeles County	69 00		
Paid Marin County	45 00		
Paid Modoc County	6 00		
Paid Napa County	318 00		
Paid San Diego County	15 00		
Paid San Joaquin County	198 00		
Paid San Luis Obispo County	387 00		
Paid San Mateo County	195 00		
Paid Santa Barbara County	66 00		
Paid Santa Clara County	123 00		
Paid Santa Cruz County	1,347 00		
Paid Shasta County	45 00		
Paid Solano County	417 00		
Paid Sonoma County	231 00		
Paid Stanislaus County	210 00		
Paid Tehama County	558 00		
Paid Tulare County	831 00		
Amount carried forward	6,582 00		
	\$6,415,105 94		

2,648,506 65

STATEMENT No. 4—Continued.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, 41st Fiscal Year.	Amount Expended during 41st Fiscal Year.	Amount Unexpended during 41st Fiscal Year.	Total Amount Expended during 41st Fiscal Year.
Mar. 16, 1889.	Amount brought forward..... <i>Home for Soldiers' Widows and Orphans, etc.</i>					\$6,415,105 94
	Building home for..... <i>State Capitol Building and Grounds.</i>		\$10,000 00	\$10,000 00		10,000 00
Mar. 21, 1889.	Pay of employes Capitol building and grounds.....		\$27,180 00	\$27,180 00		
Mar. 21, 1889.	Pay of Policemen Capitol grounds.....		3,600 00	3,600 00		
Mar. 18, 1887.	Stationery, fuel, lights—Legislature and State officers.....	\$644 60		643 20	\$1 40	
Mar. 21, 1889.	Stationery, fuel, lights—Legislature and State officers.....		10,000 00	9,727 92	272 08	
Mar. 21, 1889.	Repairs to State Capitol thirty-seventh, thirty-eighth, and thirty-ninth fiscal years.....	161 40		156 30	5 10	
Mar. 18, 1887.	Repairs to State Capitol.....	642 79		536 71	106 08	
Mar. 21, 1889.	Repairs to State Capitol.....		21,500 00	21,022 84	477 16	
Mar. 18, 1887.	Water for irrigation.....	163 48		112 37	55 36	
Mar. 21, 1889.	Water for irrigation.....		2,500 00	1,362 60	1,137 40	
Mar. 18, 1887.	Water for Capitol building.....	150 00		150 00	150 00	
Mar. 21, 1889.	Water for Capitol building.....		600 00	450 00	150 00	
Mar. 16, 1889.	Improvement Capitol grounds.....	38,806 61		38,014 41	792 20	
Mar. 16, 1889.	Construction granite steps.....		17,920 00	15,067 16	2,852 90	
Mar. 14, 1889.	Grading N Street.....		2,000 00	850 09	1,149 91	
Mar. 25, 1889.	Vault in basement of Capitol building.....		10,000 00	4,188 49	5,811 51	123,062 03
Mar. 18, 1887.	Official advertising.....	\$55 55		\$1 50	\$54 05	
Mar. 21, 1889.	Official advertising.....		\$1,500 00	236 00	1,264 00	237 50
	<i>Rewards.</i>					
Mar. 18, 1887.	Payment of rewards offered by Governor, thirty-ninth fiscal year.....	\$1,650 00		\$300 00	\$1,350 00	
Mar. 18, 1887.	Payment of rewards offered by Governor.....	1,550 00		500 00	1,050 00	
Mar. 18, 1887.	Arresting criminals outside limits of State.....	1,435 75		1,416 75	19 00	
Mar. 21, 1889.	Arresting criminals outside limits of State.....		\$5,000 00	3,495 07	1,504 93	
Mar. 18, 1887.	Arrest and conviction of highway robbers.....	1,600 00		300 00	1,300 00	
Mar. 21, 1889.	Arrest and conviction of highway robbers.....		5,000 00	900 00	4,100 00	
	Arrest and conviction of violators of election laws.....			200 00		7,111 82

STATEMENT No. 4—Continued.

Date of Act.	APPROPRIATION.	Unexpended Balance.	Appropriations, 41st Fiscal Year.	Amount Expended during 41st Fiscal Year.	Amount Unexpended during 41st Fiscal Year.	Total Amount Expended during 41st Fiscal Year.
	Amount brought forward.....					\$7,877,069 67
Mar. 21, 1889.	Citrus Fair in Sixth Congressional District.....		5,000 00	2,500 00	2,500 00	
Mar. 21, 1889.	Citrus Fair outside Sixth Congressional District.....		5,000 00	2,500 00	2,500 00	
Mar. 21, 1889.	Care of State Burial Grounds.....		500 00	486 05	13 95	
Mar. 16, 1889.	Drainage claims, payment of.....	\$13,068 00		8,460 27	4,637 73	
Feb. 26, 1889.	Eastern boundary line of State, correction of.....	3,058 67		2,568 23	490 44	
Mar. 13, 1887.	Hastings College of Law, payment of interest.....	3,500 00		3,500 00		
Mar. 21, 1889.	Hastings College of Law, payment of interest.....		7,000 00	3,500 00	3,500 00	
Mar. 18, 1887.	Hastings College of Law, rent of rooms.....	100 00		100 00		
Mar. 21, 1889.	Hastings College of Law, rent of rooms.....		1,200 00	800 00	400 00	
Mar. 11, 1889.	Marshall Monument, improvement of grounds.....	2,778 20		665 90	2,112 30	
Mar. 8, 1887.	Marshall Monument, erection of.....	500 00		500 00		
Mar. 21, 1889.	Mineral Cabinet at Sacramento, repairs to.....		100 00	99 15	85	
Mar. 6, 1889.	National Grange of Husbandry, reception to.....		10,000 00	10,000 00		
Mar. 11, 1889.	Prisons, investigation of.....	7,457 45		5,110 00	2,347 45	
Mar. 19, 1889.	River and Harbor Commission, salaries of \$2,400 per annum for each Commissioner.....			5,459 98		
Mar. 18, 1887.	Senate, pay of officers and clerks, fortieth fiscal year.....	86 00		50 00	36 00	
	Senate, contingent expenses, fortieth fiscal year.....	3,546 79		62 00	3,484 79	
Mar. 14, 1889.	Saultry, James, relief of widow and minor children of.....		20,000 00	20,000 00		
Mar. 16, 1887.	Wine labels, printing, etc.....		1,500 00	385 20	1,114 80	69,546 78
	Total expenditures.....					\$7,946,616 45

STATEMENT No. 4—Continued.

Recapitulation of Expenditures for the Forty-first Fiscal Year, ending June 30, 1890.

FOR WHAT PURPOSE EXPENDED.	Amount.
Judicial Department	\$259,499 84
Executive Department	18,362 11
Secretary of State's office	13,918 51
Controller's office	16,522 99
Treasurer's office	11,307 45
Attorney-General's office	15,331 04
Surveyor-General's office	13,269 64
Office Superintendent Public Instruction	11,331 48
State Library	52,498 39
Expenses National Guard	176,523 04
State Printing Office	245,546 38
State Engineer's Department	12,399 90
State Board of Health	4,860 91
State Board of Equalization	18,642 81
Railroad Commissioners	17,264 40
Bank Commissioners	15,691 74
Insurance Commissioner	6,172 35
Commissioners Yosemite Valley, etc.	31,328 37
Fish Commissioners	18,415 98
Forestry Commissioners	17,871 82
San Francisco Harbor Commissioners	297,259 61
State Mining Bureau	51,083 81
Bureau of Labor Statistics	5,350 00
State Board of Horticulture	17,350 81
State Board of Viticulture	18,272 52
State Board of Silk Culture	369 90
Asylum for Deaf, Dumb, and Blind	128,124 45
Adult Blind	63,422 07
Asylum for Insane at Stockton	293,569 29
Asylum for Insane at Napa	216,871 26
Asylum for Insane at Agnews	235,775 75
Asylum for Insane of Southern California ..	115,000 00
Home for Feeble-Minded Children	94,772 38
Transportation of Insane	21,463 20
State Prison at San Quentin	428,143 16
State Prison at Folsom	139,399 92
Transportation of prisoners	20,611 25
Preston School of Industry	4,596 50
Reform School for Juvenile Offenders	100,485 38
Orphan asylums	250,516 87
Aged persons in indigent circumstances ..	214,566 27
Veterans' Home	27,516 22
Agricultural societies	87,520 01
State Board of Education	251 15
State University	166,039 96
State Normal School at San José	47,568 88
State Normal School at Los Angeles	26,937 88
State Normal School at Chico	33,300 98
Support of Common Schools	2,648,506 66
Support of Grammar Schools	6,582 00
State Capitol, building and grounds	123,062 03
Official advertising	237 50
Payment of rewards	7,111 82
Purchase of bonds for School Fund	454,877 19
Payment of annual interest on bonds	158,220 00
Redemption of bonds	9,540 83
Estates of deceased persons	916 45
Railway taxes, county portion	375,579 77
Restitution of principal, land sold not property of State ..	2,398 87
Restitution of interest, land sold not property of State ..	1,229 10
Annulment of certificates of purchase, State School Land Fund ..	1,865 00
Annulment of certificate of purchase, State School Fund	33 82
Surrender of certificates of purchase	3,940 00
Home for Soldiers' Widows, Orphans, etc.	10,000 00
Miscellaneous	69,546 78
Total expenditures	\$7,946,616 45

STATEMENT No. 5.

Annual Statement of State Controller, showing the condition of the several Funds at the close of the Fortieth Fiscal Year, ending June 30, 1889.

FUNDS.	Balance on Hand.	Warrants Outstanding.	Balance in State Treasury.
General Fund	\$331,812 94	\$175,976 09	\$507,789 03
School Fund	302,348 20	56,498 87	358,847 07
Interest and Sinking Fund	156,423 64	79,140 00	235,563 64
State School Land Fund	251,584 65	571 95	252,156 60
State School Land Deposit Fund	1,460 00	-----	1,460 00
San Francisco Harbor Improvement Fund	250,772 96	2,217 51	252,990 47
University Fund	2,529 32	-----	2,529 32
State University Fund	8,424 83	-----	8,424 83
Mining Bureau Fund	246 53	-----	246 53
State Library Fund	34,923 82	-----	34,923 82
Supreme Court Library Fund	232 63	-----	232 63
Leprosy Fund	141 00	-----	141 00
War Bond Fund	5,298 37	-----	5,298 37
Yosemite Valley Fund	481 43	-----	481 43
Adult Blind Fund	8,059 79	130 00	8,189 79
Revolving Jute Fund	40,000 00	-----	40,000 00
Estate of Deceased Persons Fund	82,716 94	-----	82,716 94
Interest and Sinking Fund, Levee District No. 5	8 26	-----	8 26
Election Reward Fund	1,513 44	-----	1,513 44
Railway Tax Fund	169 72	-----	169 72
Railway Tax Contingent Fund	627 98	-----	627 98
Fish Commission Fund	19 05	1,055 76	1,074 81
San Quentin State Prison Fund	168,564 37	359 29	168,923 66
Folsom State Prison Fund	11,359 68	-----	11,359 68
Insurance Commissioner's Special Fund	1,411 10	-----	1,411 10
Bank Commissioners' Fund	531 09	1,200 00	1,731 09
State School Book Fund	79,270 12	159 07	79,429 19
State Drainage Construction Fund	8,181 14	70 05	8,251 19
Construction Fund, Drainage District No. 1	31 50	384 91	416 41
Swamp Land District No. 1	142 49	-----	142 49
Swamp Land District No. 2	883 30	-----	883 30
Swamp Land District No. 17	8 00	-----	8 00
Swamp Land District No. 18	1,040 76	-----	1,040 76
Swamp Land District No. 41	44	-----	44
Swamp Land District No. 45	9 85	-----	9 85
Swamp Land District No. 46	5 24	-----	5 24
Swamp Land District No. 49	18 70	-----	18 70
Swamp Land District No. 51	34 08	-----	34 08
Swamp Land District No. 59	27 29	-----	27 29
Total amount in State Treasury, exclusive of coupon accounts	\$1,751,314 65	\$317,763 50	\$2,069,078 15
Total amount in several coupon accounts	-----	-----	1,400 00

RECAPITULATION.

Controller's ledger balance	\$1,751,314 65
Warrants outstanding	317,763 50
Total cash in State Treasury, June 30, 1889	\$2,069,078 15
Total cash in State Treasury, June 30, 1889	\$2,069,078 15
Total cash in State Treasury, June 30, 1888	1,549,740 97
Increase of cash in State Treasury June 30, 1889, as against June 30, 1888	\$519,337 18
Total cash in coupon accounts, June 30, 1889	1,400 00

STATEMENT No. 6.

Showing the condition of the several Funds at the close of the Forty-first Fiscal Year, ending June 30, 1890.

FUNDS.	Balance on Hand.	Warrants Outstanding.	Balance in State Treasury.
General Fund	\$1,727,358 45	\$106,585 12	\$1,833,943 57
School Fund	372,322 33	47,838 31	420,160 64
Interest and Sinking Fund	194,126 84		194,126 84
State School Land Fund	48,046 27	93 90	48,140 17
State School Land Deposit Fund	19,440 00	320 00	19,760 00
San Francisco Harbor Improvement Fund	267,630 52		267,630 52
University Fund	26,153 57		26,153 57
State University Fund	9,690 44		9,690 44
Consolidated Perpetual Endowment Fund of University		2,000 00	2,000 00
Mining Bureau Fund	571 05		571 05
State Library Fund	9,507 07		9,507 07
Supreme Court Library Fund	1,089 06		1,089 06
Leprosy Fund	4,126 34		4,126 34
War Bond Fund	5,298 37		5,298 37
Yosemite Valley Fund	1,325 48		1,325 48
Adult Blind Fund	5,008 40	4,356 46	9,364 86
Revolving Jute Fund	100,000 00		100,000 00
Estates of Deceased Persons Fund	88,516 20		88,516 20
Interest and Sinking Fund, Levee District No. 5	8 26		8 26
Election Reward Fund	1,628 94		1,628 94
Railway Tax Fund	366 34	8,916 19	9,282 53
Railway Tax Contingent Fund	687 40		687 40
Fish Commission Fund	44 89	33 10	77 99
San Quentin State Prison Fund	111,754 59		111,754 59
Folsom State Prison Fund	12,693 33		12,693 33
Insurance Commissioner's Special Fund	2,038 75		2,038 75
Bank Commissioners' Fund	139 35	1,125 00	1,264 35
State School Book Fund	70,600 79	1,196 02	71,796 81
Grammar School Course Fund	68,026 59	831 00	68,857 59
State Drainage Construction Fund	8,301 54		8,301 54
Construction Fund, Drainage District No. 1	396 41		396 41
Swamp Land District No. 1	142 49		142 49
Swamp Land District No. 2	883 30		883 30
Swamp Land District No. 17	8 00		8 00
Swamp Land District No. 18	1,144 02		1,144 02
Swamp Land District No. 41	44		44
Swamp Land District No. 45	9 85		9 85
Swamp Land District No. 46	5 24		5 24
Swamp Land District No. 49	18 70		18 70
Swamp Land District No. 51	34 08		34 08
Swamp Land District No. 59	27 29		27 29
Southern California Insane Hospital Fund	235,000 00		235,000 00
Fish Commission Fund, purchase of boats	1,100 00		1,100 00
Total amount in State Treasury, exclusive of coupon accounts	\$3,395,270 98	\$173,295 10	\$3,568,566 08
Total amount in several coupon accounts			9,665 00

RECAPITULATION.

Controller's ledger balance	\$3,395,270 98
Warrants outstanding	173,295 10
Total cash in State Treasury June 30, 1890	\$3,568,566 08
Total cash in State Treasury June 30, 1890	\$3,568,566 08
Total cash in State Treasury June 30, 1889	2,069,078 15
Increase in State Treasury in forty-first as against fortieth fiscal year	\$1,499,487 93
Total amount in the several coupon accounts	9,665 00

STATEMENT No. 7.

Showing the Condition of the several Funds for the Fortieth and Forty-first Fiscal Years, respectively.

GENERAL FUND.

June 30, 1889—To warrants issued		July 1, 1888—By balance	\$418,581 84
June 30, 1889—To balance	\$3,151,954 03	June 30, 1889—By receipts	3,065,185 13
	\$3,483,766 97		\$3,483,766 97
Feb. 20, 1889—Transfer to Revolving Jute Fund	\$60,000 00	July 1, 1889—By balance	\$331,812 94
May 13, 1890—Transfer to Southern California Insane Asylum Fund	350,000 00	June 30, 1890—By receipts	5,081,828 81
June 30, 1890—To warrants issued	3,276,283 30		
June 30, 1890—To balance	1,727,358 46		
	\$5,413,641 75	July 1, 1890—By balance	\$5,413,641 75
			\$1,727,358 45

SCHOOL FUND.

June 30, 1889—To warrants issued		July 1, 1888—By balance	\$274,140 92
June 30, 1889—To balance	\$2,583,806 23	June 30, 1889—By receipts	2,582,013 51
	\$2,856,154 43		\$2,856,154 43
June 30, 1890—To warrants issued	\$2,649,769 58	July 1, 1889—By balance	\$302,348 20
June 30, 1890—To balance	372,322 33	June 30, 1890—By receipts	2,719,743 71
	\$3,022,091 91	July 1, 1890—By balance	\$3,022,091 91
			\$372,322 33

INTEREST AND SINKING FUND.

June 30, 1880—To warrants issued	\$201,820 60	July 1, 1888—By balance	\$243,505 40
June 30, 1880—To balance	150,423 04	June 30, 1880—By receipts	294,738 15
	\$448,243 04		\$448,243 04
June 30, 1890—To warrants issued	\$107,700 83	July 1, 1890—By balance	\$150,423 04
June 30, 1890—To balance	104,126 84	June 30, 1890—By receipts	205,404 03
	\$301,887 07		\$301,887 07
		July 1, 1890—By balance	\$104,126 84

STATE SCHOOL LAND FUND.

June 30, 1880—To warrants issued	\$139,978 07	July 1, 1888—By balance	\$115,700 05
June 30, 1880—To balance	251,684 05	June 30, 1880—By receipts	276,709 07
	\$391,662 72		\$391,662 72
June 30, 1890—To warrants issued	\$450,141 05	July 1, 1890—By balance	\$251,684 05
June 30, 1890—To balance	48,046 27	June 30, 1890—By receipts	255,002 08
	\$507,187 33		\$507,187 33
		July 1, 1890—By balance	\$48,046 27

SAN FRANCISCO HARBOR IMPROVEMENT FUND.

June 30, 1880—To warrants issued	\$250,014 05	July 1, 1888—By balance	\$187,002 40
June 30, 1880—To balance	250,772 06	June 30, 1880—By receipts	323,354 01
	\$500,786 11		\$510,357 01
June 30, 1890—To warrants issued	\$297,250 01	July 1, 1890—By balance	\$250,772 06
June 30, 1890—To balance	207,630 52	June 30, 1890—By receipts	314,117 17
	\$504,880 53		\$564,890 13
		July 1, 1890—By balance	\$207,630 52

UNIVERSITY FUND.

June 30, 1889—To warrants issued	\$64,287 50	July 1, 1888—By balance	\$2,563 57
June 30, 1889—To balance	2,629 32	June 30, 1889—By receipts	64,253 25
	<u>\$66,816 82</u>		<u>\$66,816 82</u>
June 30, 1890—To warrants issued	\$62,834 07	July 1, 1889—By balance	\$2,529 32
June 30, 1890—To balance	26,153 57	June 30, 1890—By receipts	86,458 32
	<u>\$88,987 64</u>		<u>\$88,987 64</u>
		July 1, 1890—By balance	<u>\$26,153 57</u>

CONSOLIDATED PERPETUAL ENDOWMENT FUND OF THE STATE UNIVERSITY.

June 30, 1889—To warrants issued	\$7,500 00	July 1, 1888—By balance	\$7,500 00
June 30, 1890—To warrants issued	2,000 00	Oct. 30, 1889—By receipts	2,000 00

STATE UNIVERSITY FUND.

June 30, 1889—To warrants issued	\$98,348 38	July 1, 1888—By balance	\$5,581 45
June 30, 1889—To balance	8,424 83	June 30, 1889—By receipts	101,191 76
	<u>\$106,773 21</u>		<u>\$106,773 21</u>
June 30, 1890—To warrants issued	\$101,205 89	July 1, 1890—By balance	\$8,424 83
June 30, 1890—To balance	9,690 44	June 30, 1890—By receipts	102,471 50
	<u>\$110,896 33</u>		<u>\$110,896 33</u>
		July 1, 1890—By balance	<u>\$9,690 44</u>

ESTATES OF DECEASED PERSONS FUND.

June 30, 1889—To warrants issued		July 1, 1888—By balance	\$74,101 17
June 30, 1889—To balance	\$1,391 88 82,716 94	June 30, 1889—By receipts	10,007 65
	<u>\$84,108 82</u>		<u>\$84,108 82</u>
June 30, 1890—To warrants issued		July 1, 1889—By balance	\$82,716 94
June 30, 1890—To balance	\$916 45 88,516 20	June 30, 1890—By receipts	6,715 71
	<u>\$89,432 65</u>		<u>\$89,432 65</u>
		July 1, 1890—By balance	\$88,516 20

ELECTION REWARD FUND.

June 30, 1889—To warrants issued		July 1, 1888—By balance	\$1,524 18
June 30, 1889—To balance	\$300 00 1,513 44	June 30, 1889—By receipts	289 26
	<u>\$1,813 44</u>		<u>\$1,813 44</u>
June 30, 1890—To warrants issued		July 1, 1889—By balance	\$1,513 44
June 30, 1890—To balance	\$200 00 1,628 94	June 30, 1890—By receipts	315 50
	<u>\$1,828 94</u>		<u>\$1,828 94</u>
		July 1, 1890—By balance	\$1,628 94

RAILWAY TAX FUND.

June 30, 1889—To warrants issued		July 1, 1888—By balance	\$149 04
June 30, 1889—To balance	\$370,661 21 169 72	June 30, 1889—By receipts	370,681 89
	<u>\$370,830 93</u>		<u>\$370,830 93</u>
June 30, 1890—To warrants issued		July 1, 1889—By balance	\$169 72
June 30, 1890—To balance	\$375,579 77 366 34	June 30, 1890—By receipts	375,776 39
	<u>\$375,946 11</u>		<u>\$375,946 11</u>
		July 1, 1890—By balance	\$366 34

RAILROAD TAX CONTINGENT FUND.

June 30, 1889—To warrants issued -----		July 1, 1888—By balance -----	\$562 74
June 30, 1889—To balance -----	\$627 98	June 30, 1889—By receipts -----	65 24
	\$627 98		\$627 98
June 30, 1890—To warrants issued -----		July 1, 1889—By balance -----	\$627 98
June 30, 1890—To balance -----	\$687 40	June 30, 1890—By receipts -----	59 42
	\$687 40		\$687 40
		July 1, 1890—By balance -----	\$687 40

FISH COMMISSION FUND.

June 30, 1889—To warrants issued -----		July 1, 1888—By balance -----	\$2,253 82
June 30, 1889—To balance -----	\$5,679 00	June 30, 1889—By receipts -----	3,444 23
	\$5,698 05		\$5,698 05
June 30, 1890—To warrants issued -----		July 1, 1889—By balance -----	\$19 05
June 30, 1890—To balance -----	\$5,283 33	June 30, 1890—By receipts -----	5,309 17
	\$5,328 22		\$5,328 22
		July 1, 1890—By balance -----	\$44 89

SAN QUENTIN STATE PRISON FUND.

June 30, 1889—To warrants issued -----		July 1, 1888—By balance -----	\$35,579 79
June 30, 1889—To balance -----	\$88,795 06	April 29, 1889—By transfer from Jute Revolving Fund -----	14,920 00
		June 30, 1889—By receipts -----	206,859 64
	\$257,359 43		\$257,359 43
June 30, 1890—To warrants issued -----		July 1, 1889—By balance -----	\$168,564 37
June 30, 1890—To balance -----	\$111,572 90	June 30, 1890—By receipts -----	54,763 12
	\$111,754 59		\$223,327 49
		July 1, 1890—By balance -----	\$111,754 59

FOLSOM STATE PRISON FUND.

June 30, 1889—To warrants issued	-----	July 1, 1888—By balance	-----	\$6,562 51
June 30, 1889—To balance	-----	June 30, 1889—By receipts	-----	4,797 17
				<u>\$11,359 68</u>
June 30, 1890—To warrants issued	-----	July 1, 1889—By balance	-----	\$11,359 68
June 30, 1890—To balance	-----	June 30, 1890—By receipts	-----	1,333 65
				<u>\$12,693 33</u>
		July 1, 1890—By balance	-----	<u>\$12,693 33</u>

BANK COMMISSIONERS' FUND.

June 30, 1889—To warrants issued	-----	July 1, 1888—By balance	-----	\$188 24
June 30, 1889—To balance	-----	June 30, 1889—By receipts	-----	15,300 00
				<u>\$15,488 24</u>
June 30, 1890—To warrants issued	-----	July 1, 1889—By balance	-----	\$531 09
June 30, 1890—To balance	-----	June 30, 1890—By receipts	-----	15,300 00
				<u>\$15,831 09</u>
		July 1, 1890—By balance	-----	<u>\$139 35</u>

STATE SCHOOL BOOK FUND.

June 30, 1889—To warrants issued	-----	July 1, 1888—By balance	-----	13,461 49
June 30, 1889—To balance	-----	June 30, 1889—By receipts	-----	130,080 05
				<u>\$143,541 54</u>
June 30, 1890—To warrants issued	-----	July 1, 1889—By balance	-----	\$79,270 12
June 30, 1890—To balance	-----	June 30, 1890—By receipts	-----	60,165 18
				<u>\$139,435 30</u>
		July 1, 1890—By balance	-----	<u>\$70,600 79</u>

STATE DRAINAGE CONSTRUCTION FUND.

June 30, 1889—To warrants issued	-----	-----	-----	July 1, 1888—By balance	-----	\$8,136 81
June 30, 1889—To balance	-----	-----	\$8,181 14	June 30, 1889—By receipts	-----	44 33
			<u>\$8,181 14</u>			<u>\$8,181 14</u>
June 30, 1890—To warrants issued	-----	-----	-----	July 1, 1889—By balance	-----	\$8,181 14
June 30, 1890—To balance	-----	-----	\$8,301 54	June 30, 1890—By receipts	-----	120 40
			<u>\$8,301 54</u>			<u>\$8,301 54</u>
				July 1, 1890—By balance	-----	<u>\$8,301 54</u>

CONSTRUCTION FUND, DRAINAGE DISTRICT No. 1.

June 30, 1889—To warrants issued	-----	-----	-----	July 1, 1888—By balance	-----	\$3 24
June 30, 1889—To balance	-----	-----	\$31 50	June 30, 1889—By receipts	-----	28 26
			<u>\$31 50</u>			<u>\$31 50</u>
June 30, 1890—To warrants issued	-----	-----	-----	July 1, 1889—By balance	-----	\$31 50
June 30, 1890—To balance	-----	-----	\$396 41	June 30, 1890—By receipts	-----	364 91
			<u>\$396 41</u>			<u>\$396 41</u>
				July 1, 1890—By balance	-----	<u>\$396 41</u>

INSURANCE COMMISSIONER'S SPECIAL FUND.

June 30, 1889—To warrants issued	-----	-----	-----	July 1, 1888—By balance	-----	\$884 55
June 30, 1889—To balance	-----	-----	\$1,473 43	June 30, 1889—By receipts	-----	2,000 00
			<u>\$1,473 43</u>			<u>\$2,884 55</u>
June 30, 1890—To warrants issued	-----	-----	-----	July 1, 1889—By balance	-----	\$1,411 10
June 30, 1890—To balance	-----	-----	\$1,372 35	June 30, 1890—By receipts	-----	2,000 00
			<u>\$1,372 35</u>			<u>\$3,411 10</u>
				July 1, 1890—By balance	-----	<u>\$2,038 75</u>

ADULT BLIND FUND, UNAVAILABLE.

April 29, 1889—To transfer to Adult Blind Fund.....	\$21,898 14	July 1, 1888—By balance.....	\$11,278 62
		June 30, 1889—By receipts.....	10,619 82
	\$21,898 14		\$21,898 14

JAMES SAULTRY FUND.

February 19, 1889—To warrant issued.....	\$350 50	September 24, 1888—By receipts—Interest on Santa Clara County Bonds	\$350 50
------------------------------------------	----------	---------------------------------------------------------------------------	----------

WAR BOND FUND.

June 30, 1889—To warrants issued.....	\$49 34	July 1, 1888—By balance.....	\$5,347 71
June 30, 1889—To balance.....	5,298 37	June 30, 1889—By receipts.....	
	\$5,347 71		\$5,347 71
June 30, 1890—To warrants issued.....	\$5,298 37	July 1, 1889—By balance.....	\$5,298 37
June 30, 1890—To balance.....		June 30, 1890—By receipts.....	
	\$5,298 37		\$5,298 37
		July 1, 1890—By balance.....	\$5,298 37

YOSEMITE FUND.

June 30, 1889—To warrants issued.....	\$5,627 94	July 1, 1888—By balance.....	\$670 40
June 30, 1889—To balance.....	481 43	June 30, 1889—By receipts.....	5,438 97
	\$6,109 37		\$6,109 37
June 30, 1890—To warrants issued.....	\$3,801 15	July 1, 1889—By balance.....	\$481 43
June 30, 1890—To balance.....	1,325 48	June 30, 1890—By receipts.....	4,145 20
	\$4,626 63		\$4,626 63
		July 1, 1890—By balance.....	\$1,325 48

ADULT BLIND FUND.

June 30, 1889—To warrants issued -----	\$35,299 74	July 1, 1888—By balance-----	\$19,325 84
June 30, 1889—To balance-----	8,059 79	June 30, 1889—By receipts-----	2,135 55
		March 29, 1889—By transfer from Adult Blind Fund (unavailable)-----	21,898 14
	<u>\$43,359 53</u>		<u>\$43,359 53</u>
June 30, 1890—To warrants issued -----	\$19,989 94	July 1, 1889—By balance-----	\$8,059 79
June 30, 1890—To balance-----	5,008 40	June 30, 1890—By receipts-----	16,938 55
	<u>\$24,998 34</u>		<u>\$24,998 34</u>
		July 1, 1890—By balance-----	<u>\$5,008 40</u>

JUTE REVOLVING FUND.

June 30, 1889—To warrants issued -----	\$47,525 75	July 1, 1888—By balance-----	\$102,445 75
April 29, 1889—To transfer to San Quentin State Prison Fund	14,920 00	June 30, 1889—By receipts-----	
June 30, 1889—To balance-----	40,000 00		<u>\$102,445 75</u>
	<u>\$102,445 75</u>		
June 30, 1890—To warrants issued -----	\$150,054 89	July 1, 1889—By balance-----	\$40,000 00
June 30, 1890—To balance-----	100,000 00	Feb. 20, 1890—By transfer from General Fund-----	60,000 00
		June 30, 1890—By receipts-----	150,054 89
	<u>\$250,054 89</u>		<u>\$250,054 89</u>
		July 1, 1890—By balance-----	<u>\$100,000 00</u>

INTEREST AND SINKING FUND, LEVEE DISTRICT No. 5.

June 30, 1889—To warrants issued	-----	-----	July 1, 1888—By balance	-----	\$8 26
June 30, 1889—To balance	-----	\$8 26	June 30, 1889—By receipts	-----	-----
					\$8 26
June 30, 1890—To warrants issued	-----	-----	July 1, 1889—By balance	-----	\$8 26
June 30, 1890—To balance	-----	\$8 26	June 30, 1890—By receipts	-----	-----
					\$8 26
			July 1, 1890—By balance	-----	\$8 26

SWAMP LAND DISTRICT No. 1 FUND.

June 30, 1889—To warrants issued	-----	-----	July 1, 1888—By balance	-----	\$142 49
June 30, 1889—To balance	-----	\$142 49	June 30, 1889—By receipts	-----	-----
					\$142 49
June 30, 1890—To warrants issued	-----	-----	July 1, 1889—By balance	-----	\$142 49
June 30, 1890—To balance	-----	\$142 49	June 30, 1890—By receipts	-----	-----
					\$142 49
			July 1, 1890—By balance	-----	\$142 49

SWAMP LAND DISTRICT No. 2 FUND.

June 30, 1889—To warrants issued	-----	-----	July 1, 1888—By balance	-----	\$883 30
June 30, 1889—To balance	-----	\$883 30	June 30, 1889—By receipts	-----	-----
					\$883 30
June 30, 1890—To warrants issued	-----	-----	July 1, 1889—By balance	-----	\$883 30
June 30, 1890—To balance	-----	\$883 30	June 30, 1890—By receipts	-----	-----
					\$883 30
			July 1, 1890—By balance	-----	\$883 30

SWAMP LAND DISTRICT No. 17 FUND.

June 30, 1889—To warrants issued	-----	-----	-----
June 30, 1889—To balance	-----	\$8 00	\$8 00
July 1, 1888—By balance	-----	-----	-----
June 30, 1889—By receipts	-----	\$8 00	\$8 00
June 30, 1890—To warrants issued	-----	-----	-----
June 30, 1890—To balance	-----	\$8 00	\$8 00
July 1, 1889—By balance	-----	-----	-----
June 30, 1890—By receipts	-----	\$8 00	\$8 00
July 1, 1890—By balance	-----	-----	\$8 00

SWAMP LAND DISTRICT No. 18 FUND.

June 30, 1889—To warrants issued	-----	-----	-----
June 30, 1889—To balance	-----	\$1,040 76	\$1,029 83
July 1, 1888—By balance	-----	-----	10 93
June 30, 1889—By receipts	-----	\$1,040 76	\$1,040 76
June 30, 1890—To warrants issued	-----	-----	-----
June 30, 1890—To balance	-----	\$1,144 02	\$1,040 76
July 1, 1889—By balance	-----	-----	103 26
June 30, 1890—By receipts	-----	\$1,144 02	\$1,144 02
July 1, 1890—By balance	-----	-----	\$1,144 02

SWAMP LAND DISTRICT No. 41 FUND.

June 30, 1889—To warrants issued	-----	-----	-----
June 30, 1889—To balance	-----	\$0 44	\$0 44
July 1, 1888—By balance	-----	-----	-----
June 30, 1889—By receipts	-----	\$0 44	\$0 44
June 30, 1890—To warrants issued	-----	-----	-----
June 30, 1890—To balance	-----	\$0 44	\$0 44
July 1, 1889—By balance	-----	-----	-----
June 30, 1890—By receipts	-----	\$0 44	\$0 44
July 1, 1890—By balance	-----	-----	\$0 44

SWAMP LAND DISTRICT No. 45 FUND.

June 30, 1889—To warrants issued	July 1, 1888—By balance	\$9 85
June 30, 1889—To balance	June 30, 1889—By receipts	\$9 85
		\$9 85
June 30, 1890—To warrants issued	July 1, 1889—By balance	\$9 85
June 30, 1890—To balance	June 30, 1890—By receipts	\$9 85
		\$9 85
	July 1, 1890—By balance	\$9 85

SWAMP LAND DISTRICT No. 46 FUND.

June 30, 1889—To warrants issued	July 1, 1888—By balance	\$5 24
June 30, 1889—To balance	June 30, 1889—By receipts	\$5 24
		\$5 24
June 30, 1890—To warrants issued	July 1, 1889—By balance	\$5 24
June 30, 1890—To balance	June 30, 1890—By receipts	\$5 24
		\$5 24
	July 1, 1890—By balance	\$5 24

SWAMP LAND DISTRICT No. 49 FUND.

June 30, 1889—To warrants issued	July 1, 1888—By balance	\$18 70
June 30, 1889—To balance	June 30, 1889—By receipts	\$18 70
		\$18 70
June 30, 1890—To warrants issued	July 1, 1889—By balance	\$18 70
June 30, 1890—To balance	June 30, 1890—By receipts	\$18 70
		\$18 70
	July 1, 1890—By balance	\$18 70

SWAMP LAND DISTRICT No. 51 FUND.

June 30, 1889—To warrants issued		July 1, 1888—By balance	\$34 08
June 30, 1889—To balance	\$34 08	June 30, 1889—By receipts	\$34 08
June 30, 1890—To warrants issued		July 1, 1889—By balance	\$34 08
June 30, 1890—To balance	\$34 08	June 30, 1890—By receipts	\$34 08
		July 1, 1890—By balance	\$34 08
			\$34 08

SWAMP LAND DISTRICT No. 59 FUND.

June 30, 1889—To warrants issued		July 1, 1888—By balance	\$27 29
June 30, 1889—To balance	\$27 29	June 30, 1889—By receipts	\$27 29
June 30, 1890—To warrants issued		July 1, 1889—By balance	\$27 29
June 30, 1890—To balance	\$27 29	June 30, 1890—By receipts	\$27 29
		July 1, 1890—By balance	\$27 29
			\$27 29

SCHOOL LAND DEPOSIT FUND.

June 30, 1889—To warrants issued		June 30, 1889—By receipts	\$1,460 00
June 30, 1889—To balance	\$1,460 00		
			\$1,460 00
June 30, 1890—To warrants issued	\$3,940 00	July 1, 1889—By balance	\$1,460 00
June 30, 1890—To balance	19,440 00	June 30, 1890—By receipts	\$21,920 00
			\$23,380 00
		July 1, 1890—By balance	\$19,440 00

FISH COMMISSIONERS' FUND, PURCHASE OF BOATS.

June 30, 1890—To warrants issued	-----	June 30, 1890—By receipts	-----
June 30, 1890—To balance	-----		-----
			\$1,100 00
			<u>\$1,100 00</u>
		July 1, 1890—By balance	-----
			<u>\$1,100 00</u>

SOUTHERN CALIFORNIA INSANE ASYLUM FUND.

June 30, 1890—To warrants issued	-----	June 30, 1890—By receipts (from General Fund)	-----
June 30, 1890—To balance	-----		-----
			\$115,000 00
			<u>235,000 00</u>
			<u>\$350,000 00</u>
		July 1, 1890—By balance	-----
			<u>\$235,000 00</u>

GRAMMAR SCHOOL COURSE FUND.

June 30, 1890—To warrants issued	-----	June 30, 1890—By receipts	-----
June 30, 1890—To balance	-----		-----
			\$6,582 00
			<u>68,026 59</u>
			<u>\$74,608 59</u>
		July 1, 1890—By balance	-----
			<u>\$68,026 59</u>

STATE LIBRARY FUND.

June 30, 1889—To warrants issued	-----	July 1, 1888—By balance	-----
June 30, 1889—To balance	-----	June 30, 1889—By receipts	-----
			\$13,074 59
			<u>34,923 82</u>
			<u>\$47,998 41</u>
June 30, 1890—To warrants issued	-----	July 1, 1889—By balance	-----
June 30, 1890—To balance	-----	June 30, 1890—By receipts	-----
			\$44,779 30
			<u>9,607 07</u>
			<u>\$54,286 37</u>
		July 1, 1890—By balance	-----
			<u>\$9,507 07</u>

SUPREME COURT LIBRARY FUND.

June 30, 1889—To warrants issued	\$2,212 80	July 1, 1888—By balance	\$297 41
June 30, 1889—To balance	232 63	June 30, 1889—By receipts	2,148 02
	<u>\$2,445 43</u>		<u>\$2,445 43</u>
June 30, 1890—To warrants issued	\$1,636 75	July 1, 1889—By balance	\$232 63
June 30, 1890—To balance	1,089 06	June 30, 1890—By receipts	2,303 18
	<u>\$2,625 81</u>		<u>\$2,625 81</u>
		July 1, 1890—By balance	<u>\$1,089 06</u>

MINING BUREAU FUND.

June 30, 1889—To warrants issued	\$5,514 60	July 1, 1888—By balance	\$488 08
June 30, 1889—To balance	246 53	June 30, 1889—By receipts	5,272 15
	<u>\$5,761 13</u>		<u>\$5,761 13</u>
June 30, 1890—To warrants issued	\$5,727 03	July 1, 1889—By balance	\$246 53*
June 30, 1890—To balance	571 05	June 30, 1890—By receipts	6,051 55
	<u>\$6,298 08</u>		<u>\$6,298 08</u>
		July 1, 1890—By balance	<u>\$571 05</u>

LEPROSY FUND.

June 30, 1889—To warrants issued	-----	July 1, 1888—By balance	-----	\$141 00
June 30, 1889—To balance	-----	June 30, 1889—By receipts	-----	
				\$141 00
June 30, 1890—To warrants issued	-----	July 1, 1889—By balance	-----	\$141 00
June 30, 1890—To balance	-----	June 30, 1890—By receipts	-----	3,985 34
				\$4,126 34
		July 1, 1890—By balance	-----	\$4,126 34

REPORT OF THE STATE CONTROLLER.

STATEMENT No. 8.

Amount received for School Purposes from Property Tax, Poll Tax, and from Interest on State School Lands, from the several Counties of the State, and from other sources, for the Fortieth Fiscal Year, ending June 30, 1889, and total distributed to the several Counties for the same time.

COUNTIES.	Property Tax.	Poll Tax.	Interest on Lands.	Total Amount Received.	Amount Apportioned.
Alameda	\$117,872 86	\$15,760 70	\$43 92	\$133,677 48	\$198,768 96
Alpine	406 86	195 50	39 20	641 56	804 96
Amador	7,361 10	2,123 30	468 04	9,952 44	28,538 64
Butte	35,084 05	7,122 50	303 01	42,509 56	39,180 96
Calaveras	7,318 55	2,402 10	1,234 13	10,954 78	22,108 32
Colusa	43,244 03	5,960 60	732 18	49,936 81	30,504 24
Contra Costa	25,867 50	4,172 65	81	30,040 96	31,384 08
Del Norte	3,470 30	765 00	688 31	4,923 61	4,754 88
El Dorado	6,390 50	3,233 40	2,492 81	12,121 51	21,284 64
Fresno	59,733 56	7,380 55	5,019 76	72,133 87	54,858 96
Humboldt	31,964 27	7,772 85	3,140 52	42,877 64	52,369 20
Inyo	2,349 83	1,345 90	751 55	4,447 28	5,587 92
Kern	15,856 20	2,384 95	8,239 45	26,580 60	15,228 72
Lake	6,508 45	1,736 85	978 99	9,224 29	16,638 24
Lassen	4,941 88	1,904 90	3,454 52	10,301 30	9,303 84
Los Angeles	175,915 45	32,421 70	2,201 86	210,539 01	255,060 00
Marin	19,302 83	3,444 20		22,747 03	21,462 48
Mariposa	3,294 69	1,323 15	455 84	5,073 68	9,219 60
Mendocino	20,563 64	7,559 90	5,631 84	33,755 38	39,480 48
Merced	25,351 17	2,989 50	1,890 08	30,230 75	14,704 56
Modoc	5,824 42	1,770 10	2,566 00	9,860 52	13,412 88
Mono	1,594 98	717 40	775 94	3,088 32	2,976 48
Monterey	25,236 23	5,489 30	2,940 78	33,666 31	40,762 80
Napa	24,875 45	5,965 60	386 47	31,227 52	33,340 32
Nevada	10,078 92	4,969 10	487 71	15,535 73	44,169 84
Placer	13,976 29	4,941 19	480 24	19,397 72	27,443 52
Plumas	3,878 81	1,882 75	1,598 83	7,360 39	9,771 84
Sacramento	59,747 00	14,436 05	72 74	74,255 79	80,533 44
San Benito	10,861 74	1,915 90	1,452 02	14,229 66	18,242 64
San Bernardino	38,794 92	6,929 30	2,621 07	48,345 29	55,064 88
San Diego	70,222 36	19,847 45	4,819 97	94,889 78	75,563 28
San Francisco	493,197 86	71,748 40		564,946 26	558,913 68
San Joaquin	67,070 95	10,316 60	1,923 05	79,310 60	58,086 72
San Luis Obispo	23,486 78	5,671 30	4,303 03	35,460 11	38,854 64
San Mateo	24,181 68	2,003 75	64 05	26,249 48	24,111 36

Santa Barbara.....	35,472 11	3,836 05	719 16	40,027 32	38,862 72
Santa Clara.....	93,784 86	14,001 35	682 27	108,468 48	106,384 24
Santa Cruz.....	17,401 81	3,787 60	143 08	21,833 09	40,800 24
Shasta.....	8,650 62	2,882 10	1,192 58	12,575 30	30,522 93
Sierra.....	2,075 73	2,205 00	104 99	5,375 72	10,324 08
Siskiyou.....	8,055 76	3,962 70	7,649 21	20,567 67	22,900 08
Solano.....	31,870 63	4,686 00	177 00	36,634 83	42,372 72
Sonoma.....	52,819 94	7,774 70	253 87	60,848 51	79,120 08
Stanislaus.....	26,855 53	3,118 60	1,053 55	31,030 68	22,464 00
Sutter.....	17,533 24	649 40	11 76	18,194 40	12,383 28
Tehama.....	19,500 80	4,668 00	2,269 06	26,467 86	25,028 64
Trinity.....	1,990 24	1,242 70	616 73	3,849 67	7,057 44
Tulare.....	41,213 51	7,122 55	3,801 02	52,137 08	54,250 53
Tuolumne.....	4,685 75	629 85	475 48	5,491 08	14,826 24
Ventura.....	16,318 57	2,837 30	341 11	18,496 98	21,378 24
Yolo.....	35,107 92	4,778 70	87 14	39,973 76	30,148 93
Yuba.....	12,030 24	1,840 25	342 12	14,212 61	20,663 92
Totals.....	\$1,914,002 37	\$340,572 84	\$82,272 85	\$2,336,458 06	\$2,531,880 00
Total amount received from counties.....				\$2,336,458 06	
Total amount received from interest on bonds.....				165,484 47	
Total amount received from taxes on railways.....				79,503 48	
Total amount received from sales of Geological Survey Reports.....				24 50	
Total receipts.....				\$2,582,013 51	
Balance unapportioned from thirty-ninth fiscal year.....				220,535 27	
Balance apportioned in thirty-ninth fiscal year, but not drawn.....				53,005 65	
Total.....				\$2,856,154 43	
By amount apportioned.....					\$2,531,880 00
By amount apportioned in thirty-ninth fiscal year, but drawn in fortieth fiscal year.....					53,005 65
By restitution of interest—land sold not property of State.....					1,327 03
By balance subject to next semi-annual apportionment.....					289,341 72
Total.....					\$2,856,154 43

Cr.

STATEMENT No. 9.

Amount received for School Purposes from Property Tax, Poll Tax, and from Interest on State School Lands, from the several Counties of the State, and from other sources, for the Forty-first Fiscal Year, ending June 30, 1890, and total distributed to the several Counties for the same time.

COUNTIES.	Property Tax.	Poll Tax.	Interest on Lands.	Total Amount Received.	Amount Apportioned.
Alameda.....	\$132,742 41	\$18,632 00	\$1,086 24	\$152,460 65	\$210,042 70
Alpine.....	370 27	222 70	13 36	606 33	840 40
Amador.....	8,326 16	2,564 05	296 67	11,186 88	27,293 90
Butte.....	37,880 69	7,518 80	455 01	45,854 50	40,123 10
Calaveras.....	7,926 40	2,734 15	296 17	10,956 72	23,149 20
Colusa.....	45,055 47	4,002 95	310 18	49,368 60	31,438 60
Contra Costa.....	28,475 52	4,096 06	-----	32,571 58	32,882 00
Del Norte.....	3,612 24	705 00	834 94	5,212 18	4,622 20
El Dorado.....	6,744 87	2,820 65	1,068 08	10,633 60	21,286 95
Fresno.....	63,520 66	9,361 05	4,128 81	77,010 52	61,473 35
Humboldt.....	34,955 00	7,688 25	1,107 08	43,750 33	56,239 95
Inyo.....	2,309 61	1,117 30	764 38	4,191 29	5,815 95
Kern.....	19,093 63	3,901 75	6,195 07	29,190 45	17,027 65
Lake.....	7,554 91	1,609 05	1,182 62	10,346 58	18,068 60
Lassen.....	4,504 72	1,205 00	3,628 63	9,238 35	9,664 00
Los Angeles.....	155,575 08	33,579 10	1,990 83	191,145 01	265,480 45
Marin.....	19,650 76	3,578 50	-----	23,229 26	24,161 50
Mariposa.....	3,275 07	873 50	274 87	4,423 44	9,206 20
Mendocino.....	21,004 80	7,372 90	1,321 80	29,699 50	41,112 75
Merced.....	25,737 98	3,417 00	711 15	29,866 13	15,442 35
Modoc.....	5,373 32	1,686 05	2,658 87	9,018 24	13,561 00
Mono.....	1,600 16	519 35	224 45	2,343 96	2,893 65
Monterey.....	26,767 98	4,340 64	1,764 85	32,873 47	43,146 90
Napa.....	26,364 38	5,751 65	169 67	32,285 70	33,577 80
Nevada.....	10,805 63	3,620 60	279 95	14,706 18	40,708 95
*Orange.....	14,889 69	40 80	-----	14,930 49	-----
Placer.....	15,335 59	5,600 30	342 50	21,278 39	28,697 75
Plumas.....	4,116 72	1,727 20	498 69	6,342 61	9,846 05
Sacramento.....	63,560 64	16,581 80	50 96	80,193 40	70,832 35
San Benito.....	11,594 25	1,915 65	785 13	14,295 03	19,071 35
San Bernardino.....	37,128 82	8,761 15	2,808 31	48,698 28	57,204 50
San Diego.....	52,011 71	11,410 45	3,416 48	66,838 64	79,446 45
San Francisco.....	562,296 01	76,435 75	-----	628,731 76	579,131 10
San Joaquin.....	70,230 56	10,954 30	492 29	81,677 15	69,572 90
San Luis Obispo.....	26,300 64	2,462 45	904 17	29,667 26	42,039 10

San Mateo.....	25,920 02	2,388 50	246 63	28,555 18	23,789 05
Santa Barbara.....	29,108 11	4,021 80	884 98	34,071 39	42,784 00
Santa Clara.....	98,884 38	14,293 10	138 12	113,291 60	113,136 15
Santa Cruz.....	20,238 22	7,018 40	604 25	27,860 87	44,283 35
Shasta.....	9,715 92	3,921 75	1,614 02	15,251 69	30,963 80
Sierra.....	2,918 22	2,068 90	492 80	5,479 92	10,151 65
Siskiyou.....	10,217 41	3,787 60	579 53	14,584 54	25,498 50
Solano.....	37,980 61	4,574 70	26 08	42,581 39	42,745 80
Sonoma.....	56,931 90	12,575 15	272 21	69,779 26	81,432 85
Stanislaus.....	29,588 21	2,618 50	318 97	32,525 68	22,030 80
Sutter.....	18,906 80	3,271 30	777 73	22,178 10	12,500 95
Tehama.....	20,774 00	3,490 60	333 81	25,042 33	25,366 90
Trinity.....	1,620 69	1,258 00	2,448 53	3,172 60	7,229 39
Tulare.....	42,601 44	7,955 90	2,448 53	53,005 87	57,901 05
Tuolumne.....	4,944 10	588 20	309 51	5,841 81	15,241 80
Ventura.....	15,337 96	2,943 55	434 79	18,716 30	24,066 00
Yolo.....	37,522 18	5,568 35	104 73	43,195 26	32,546 40
Yuba.....	12,783 57	1,870 00	62 29	14,715 86	21,076 85
Totals.....	\$2,022,646 09	\$352,927 70	\$49,071 82	\$2,424,645 61	\$2,629,134 10
Total amount received from counties.....				\$2,424,645 61	
Total amount received from interest on bonds.....				216,943 38	
Total amount received from taxes on railways.....				78,154 72	
Total receipts.....				\$2,719,743 71	
Balance unapportioned from fortieth fiscal year.....				263,341 72	\$2,629,134 10
Amount apportioned in fortieth fiscal year, undrawn.....				33,006 48	33,006 48
Total.....				\$3,022,091 91	1,229 10
By amount apportioned.....					33 82
By amount apportioned in fortieth fiscal year, but paid in forty-first fiscal year.....					358,688 41
By restitution of interest—land sold not the property of State.....					
By costs of annulment certificates of purchase.....					
By balance subject to next semi-annual apportionment.....					
Total.....					\$3,022,091 91

* Amount apportioned to Orange County is included in the Los Angeles apportionment.

STATEMENT No. 10.

Assessed Value of Railroads, as fixed by the State Board of Equalization for the Year 1888, and Amount of Tax Levied for State and County purposes for said Year, and date of Payment of said Taxes.

NAMES OF RAILROADS ASSESSED AND OF COUNTIES RECEIVING APPORTIONMENT.	Number of Miles of each Railroad operated in the State....	Number of Miles of each Railroad in each County.....	Assessed Value per Mile.	Total Assessed Valuation.	Value Apportioned to Each County.	Amount of Tax for State Purposes.	Amount of Tax for County Purposes.	Total State and County Taxes.	When Paid.
<i>Amador Branch Railroad.</i>									
Amador.....	27.00	8.00	\$5,000 00	\$135,000 00	\$40,000 00	\$680 40	\$398 40	\$1,787 50	Dec. 28, 1888.
Sacramento.....		19.00	-----	-----	95,000 00	-----	708 70	-----	-----
<i>California Pacific Railroad.</i>									
Napa.....	112.50	41.00	22,222 22	2,500,000 00	911,111 00	12,600 00	8,365 66	-----	-----
Sacramento.....		.50	-----	-----	11,111 00	-----	55 11	-----	-----
Solano.....		40.00	-----	-----	888,889 00	-----	7,520 00	-----	-----
Yolo.....		31.00	-----	-----	688,889 00	-----	5,082 45	-----	-----
<i>California Central Railway</i>									
Los Angeles.....	180.93	103.01	6,356 04	1,150,000 00	654,737 00	5,796 00	4,328 02	-----	-----
San Bernardino.....		56.69	-----	-----	360,324 00	-----	2,473 50	-----	-----
San Diego.....		21.23	-----	-----	134,939 00	-----	1,343 99	-----	-----
<i>California Southern Railroad.</i>									
San Bernardino.....	210.61	96.75	6,647 35	1,400,000 00	633,074 00	7,056 00	4,904 98	-----	-----
San Diego.....		110.86	-----	-----	736,926 00	-----	6,870 74	-----	-----
<i>Central Pacific Railroad.</i>									
Alameda.....	747.14	33.52	20,076 55	15,000,000 00	1,676,794 00	75,600 00	11,147 09	-----	-----
Butte.....		45.00	-----	-----	903,445 00	-----	7,615 83	-----	-----
Fresno.....		60.13	-----	-----	1,207,203 00	-----	7,498 46	-----	-----
Merced.....		36.75	-----	-----	737,813 00	-----	7,348 61	-----	-----
Nevada.....		30.25	-----	-----	607,316 00	-----	9,682 76	-----	-----
Placer.....		112.75	-----	-----	2,263,632 00	-----	25,797 60	-----	-----
Sacramento.....		41.00	-----	-----	823,139 00	-----	6,015 14	-----	-----
San Francisco.....		2.46	-----	-----	49,388 00	-----	526 96	-----	-----
San Joaquin.....		56.75	-----	-----	1,139,345 00	-----	6,711 79	-----	-----
Santa Clara.....		8.50	-----	-----	170,651 00	-----	836 00	-----	-----

Shasta.....	82.08	-----	-----	1,047,884 00	-----	-----	24,052 34
Sierra.....	2.15	-----	-----	43,165 00	-----	-----	947 90
Siskiyou.....	83.18	-----	-----	1,609,068 00	-----	-----	16,032 88
Stanislaus.....	22.63	-----	-----	454,332 00	-----	-----	2,074 69
Sutter.....	10.00	-----	-----	200,763 00	-----	-----	965 79
Tehama.....	40.54	-----	-----	813,904 00	-----	-----	8,084 40
Tulare.....	13.58	-----	-----	272,640 00	-----	-----	1,624 93
Yuba.....	16.87	-----	-----	318,615 00	-----	-----	3,879 59
<i>Northern Railway</i>	148.40	-----	14,983 26	2,225,000 00	-----	11,214 00	218,312 76
Alameda.....	6.85	-----	-----	102,704 00	-----	-----	505 24
Colusa.....	62.81	-----	-----	941,727 00	-----	-----	6,523 83
Contra Costa.....	23.75	-----	-----	356,060 00	-----	-----	2,254 19
Solano.....	16.95	-----	-----	254,136 00	-----	-----	2,149 96
Tehama.....	17.29	-----	-----	259,233 00	-----	-----	2,581 96
Yolo.....	20.75	-----	-----	311,110 00	-----	-----	2,320 88
<i>Northern California Railroad</i>	26.50	-----	4,150 94	110,000 00	-----	554 40	27,640 09
Butte.....	14.50	-----	-----	60,180 00	-----	-----	509 19
Yuba.....	12.00	-----	-----	49,811 00	-----	-----	612 34
<i>Pajaro and Santa Cruz Railroad</i>	26.16	-----	5,733 94	150,000 00	-----	756 00	1,675 93
Monterey.....	1.16	-----	-----	6,651 00	-----	-----	66 24
Santa Cruz.....	25.00	-----	-----	143,349 00	-----	-----	1,363 81
<i>Sacramento and Placerville Railroad</i>	48.50	-----	6,185 56	300,000 00	-----	1,512 00	2,186 05
El Dorado.....	18.75	-----	-----	115,979 00	-----	-----	1,793 03
Sacramento.....	29.75	-----	-----	184,021 00	-----	-----	1,334 13
<i>San Francisco and North Pacific R. R.</i>	92.50	-----	12,972 97	1,200,000 00	-----	6,048 00	4,639 16
Marin.....	16.85	-----	-----	218,595 00	-----	-----	1,615 30
Sonoma.....	75.65	-----	-----	981,405 00	-----	-----	6,044 94
<i>San Pablo and Tulare Railroad</i>	46.00	-----	19,565 21	900,000 00	-----	4,536 00	13,708 24
Alameda.....	1.40	-----	-----	27,392 00	-----	-----	204 34
Contra Costa.....	36.10	-----	-----	706,304 00	-----	-----	4,562 72
San Joaquin.....	8.50	-----	-----	166,304 00	-----	-----	991 17
<i>San Pablo and Tulare Extension R. R.</i>	36.00	-----	5,000 00	180,000 00	-----	907 20	10,294 23
San Joaquin.....	10.80	-----	-----	54,000 00	-----	-----	321 84
Stanislaus.....	25.20	-----	-----	126,000 00	-----	-----	750 96
<i>Southern Pacific Railroad</i>	1,022.33	-----	13,694 20	14,000,000 00	-----	70,560 00	1,926 90
Fresno.....	17.43	-----	-----	238,690 00	-----	-----	321 84
Kern.....	153.47	-----	-----	2,101,650 00	-----	-----	750 96
							1,494 19
							21,983 25

Dec. 28, 1888.

Dec. 23, 1888.

Dec. 27, 1888.

Dec. 23, 1882.

Dec. 23, 1883.

Dec. 28, 1888.

Dec. 28, 1888.

Dec. 28, 1888.

STATEMENT No. 10—Continued.

NAMES OF RAILROADS ASSESSED AND OF COUNTIES RECEIVING APPORTIONMENT.	Number of Miles of each Railroad operated in the State	Number of Miles of each Railroad in each County	Assessed Value per Mile.	Total Assessed Valuation.	Value Apportioned to Each County.	Amount of Tax for State Purposes.	Amount of Tax for County Purposes.	Total State and County Taxes.	When Paid.
<i>Los Angeles</i>		142.48			\$1,951,151 00		\$13,262 30		
Monterey		109.14			1,494,586 00		14,886 07		
San Benito		17.65			241,703 00		2,507 67		
San Bernardino		261.47			3,580,625 00		26,670 38		
San Diego		158.85			2,175,325 00		21,666 23		
San Francisco		7.36			100,789 00		1,075 41		
San Luis Obispo		5.45			74,633 00		691 10		
San Mateo		25.10			343,725 00		2,330 70		
Santa Clara		59.30			812,067 00		4,242 50		
Santa Cruz		2.15			29,442 00		287 35		
Tulare		62.48			855,614 00		5,069 45	\$186,756 60	Dec. 28, 1888.
<i>Southern Pacific Branch Railway</i>	104.85		\$5,960 89	\$825,000 00		\$3,150 00			
Los Angeles		10.00			59,609 00		414 87		
San Luis Obispo		13.35			79,578 00		736 89		
Santa Barbara		27.00			160,944 00		1,144 75		
Ventura		54.50			324,869 00		2,888 17	8,334 68	Dec. 28, 1888.
<i>Stockton and Copperopolis Railroad</i>	44.63		7,842 25	350,000 00		1,764 00			
Calaveras		.66			5,176 00		61 90		
San Joaquin		32.81			257,304 00		1,509 06		
Stanislaus		11.16			87,520 00		521 61	3,856 57	Dec. 28, 1888.
<i>Stockton and Tulare Railroad</i>	29.80		\$5,000 00	\$149,000 00		\$750 96			
Fresno		25.20			\$126,000 00		\$788 76		
Tulare		4.60			23,000 00		137 08	\$1,676 80	Dec. 28, 1888.
<i>Yuba Valley and Clear Lake R. R.</i>	28.55		8,756 56	250,000 00		1,260 00			
Solano		16.50			144,483 00		1,222 32		
Yolo		12.05			105,517 00		787 15	3,269 47	Dec. 28, 1888.
<i>Carson and Colorado Railroad</i>	107.62		2,137 14	230,000 00		1,159 20			
Inyo		74.25			158,683 00		3,167 31		
Mono		33.37			71,317 00		1,245 19	5,571 70	Dec. 27, 1888.

	8.86	1,580 13	14,000 00	70 56	307 20	Dec. 5, 1888.
<i>Nevada and California Railroad</i>						
Lassen	5.60			8,849 00	123 53	
Sierra	3.26			5,151 00	113 11	
<i>North Pacific Coast Railroad</i>						
Marin	70.25	4,982 20	350,000 00	1,764 00	4,249 50	Dec. 29, 1888.
Sonoma						
<i>Pacific Coast Railroad</i>						
San Luis Obispo	76.10	5,256 24	400,000 00	2,016 00	5,346 11	Dec. 29, 1888.
Santa Barbara						
<i>San Joaquin and Sierra Nevada R. R.</i>						
Calaveras	39.60	3,787 87	150,000 00	756 00	1,872 71	Dec. 28, 1888.
San Joaquin						
<i>South Pacific Coast Railroad</i>						
Alameda	84.86	15,024 74	1,275,000 00	6,426 00	15,449 86	Dec. 28, 1888.
Santa Clara						
Santa Cruz						
<i>Nevada County Narrow Gauge R. R.</i>						
Nevada	22.50	4,444 44	100,000 00	504 00	2,008 17	Dec. 29, 1888.
Placer						
<i>Atlantic and Pacific Railroad</i>						
Kern (Southern Pacific Railroad)	242.51	350 50	85,000 00	428 40	1,699 96	Mar. 5, 1889.
San Bernardino (S. P. R. R.)						
<i>Pullman Palace Car Company</i>						
Alameda (Central Pacific R. R.)	747.14	13 38	10,000 00	50 40		
Butte						
Fresno						
Merced						
Nevada						
Placer						
Sacramento						
San Francisco						
San Joaquin						
Santa Clara						
Shasta						
Sierra						
Siskiyou						
Stanislaus						
Sutter						

STATEMENT No. 10—Continued.

NAMES OF RAILROADS ASSESSED AND OF COUNTIES RECEIVING APPORTIONMENT.	Number of Miles of each Railroad operated in the State...	Number of Miles of each Railroad in each County	Assessed Value per Mile.	Total Assessed Valuation.	Value Apportioned to Each County.	Amount of Tax for State Purposes.	Amount of Tax for County Purposes.	Total State and County Taxes.	When Paid.
Tehama		40.54			\$543 00		\$5 39		
Tulare		13.58			182 00		1 08		
Yuba		15.87			212 00		2 58	\$145 48	Mar. 18, 1889.
<i>Pullman Palace Car Company</i>	615.20		\$7 56	\$4,652 00		\$25 44			
Alameda (Northern Railway)		6.85			52 00		30		
Alameda (S. Pablo & Tulare R. R.)		1.40			10 00		07		
Contra Costa (Northern Railroad)		23.75			180 00		1 13		
Contra Costa (S. Pablo & Tulare)		36.10			273 00		1 76		
San Joaquin (S. Pablo & Tulare)		8.50			64 00		38		
San Joaquin (Central P. R. R.)		22.00			166 00		98		
Stanislaus (Central Pacific R. R.)		22.63			171 00		1 01		
Merced (Central Pacific Railroad)		36.75			278 00		2 76		
Fresno (Central Pacific Railroad)		60.13			455 00		2 82		
Tulare (Central Pacific Railroad)		13.50			103 00		61		
Tulare (Southern Pacific R. R.)		29.50			269 00		1 78		
Kern (Southern Pacific Railroad)		137.14			1,037 00		10 84		
San Bernardino (S. P. R. R.)		206.87			1,564 00		11 66	59 54	Mar. 18, 1889.
Totals	2,584.70	2,584.70		\$43,242,652 00	\$43,242,652 00	\$217,942 96	\$370,681 89	\$588,624 85	

NOTE.—The assessments against the Atlantic and Pacific Railroad Company and the Pullman Palace Car Company are for rolling stock used on the various railroads, as shown in statement; therefore, the mileage set opposite these companies does not figure in the total mileage of roads operated.

STATEMENT No. 11.

Assessed Value of Railroads, as fixed by the State Board of Equalization for the Year 1889, and Amount of Tax Levied for State and County purposes for said Year, and Date of Payment of said Taxes.

NAMES OF RAILROADS ASSESSED AND OF COUNTIES RECEIVING APPOINTMENT.	Number of Miles of each Railroad operated in the State	Number of Miles of each Railroad in each County	Assessed Value per Mile.	Total Assessed Valuation.	Value Apportioned to each County.	Amount of Tax for State Purposes.	Amount of Tax for County Purposes.	Total State and County Taxes.	When Paid.
<i>California Central Railway</i>	253.40		\$5,919 40	\$1,500,000 00		\$10,830 00			
San Bernardino		60.30			\$356,946 00		\$2,574 65		
San Diego		57.30			339,187 00		4,808 60		
Los Angeles		70.60			417,916 00		4,240 88		
Orange		65.20			385,951 00		3,526 23	\$25,980 36	Dec. 30, 1889.
<i>California Pacific Railroad</i>	112.50		22,222 22	2,500,000 00		18,050 00			
Napa		41.00			911,111 00		8,606 53		
Sacramento		.50			11,111 00		58 66		
Solano		40.00			888,889 00		6,966 62		
Yolo		31.00			688,889 00		5,312 33	38,994 14	Dec. 30, 1889.
<i>California Southern Railroad</i>	210.60		5,223 17	1,100,000 00		7,942 00			
San Bernardino		99.75			521,011 00		4,022 12		
San Diego		110.85			578,989 00		7,856 95	19,821 07	Dec. 30, 1889.
<i>Central Pacific Railroad</i>	746.76		17,408 53	13,000,000 00		93,860 00			
Alameda		83.14			1,447,346 00		9,355 85		
Butte		45.00			783,384 00		6,464 65		
Fresno		60.13			1,046,775 00		8,085 41		
Merced		36.75			639,764 00		6,474 92		
Nevada		30.25			526,608 00		9,099 78		
Placer		112.75			1,962,813 00		25,938 20		
Sacramento		41.00			713,750 00		5,444 17		
San Francisco		2.46			42,825 00		428 25		
San Joaquin		56.75			987,935 00		6,636 78		
Santa Clara		8.50			147,973 00		1,008 82		
Shasta		82.08			1,428,893 00		21,693 95		
Sierra		2.15			37,428 00		777 75		
Siskiyou		83.18			1,448,042 00		11,265 76		

STATEMENT No. 11—Continued.

NAMES OF RAILROADS ASSESSED AND OF COUNTIES RECEIVING APPORTIONMENT.	Number of Miles of each Rail- road in each County.....	Assessed Value per Mile.	Total Assessed Valuation.	Value Appor- tioned to each County.	Amount of Tax for State Pur- poses.	Amount of Tax for County Pur- poses.	Total State and County Taxes.	When Paid.
Stanislaus.....	22.63	---	---	\$393,955 00	---	\$2,521 49	---	Dec. 30, 1889.
Sutter.....	10.00	---	---	174,085 00	---	1,058 43	---	---
Tehama.....	40.54	---	---	705,742 00	---	7,227 17	---	---
Tulare.....	13.58	---	---	236,408 00	---	1,602 84	---	---
Yuba.....	15.87	---	---	276,274 00	---	3,457 13	---	---
<i>San Francisco and North Pacific R. R.</i>	89.50	\$13,407 82	\$1,200,000 00	---	\$8,664 00	---	\$222,401 35	Dec. 30, 1889.
Marin.....	16.49	---	---	221,095 00	---	1,486 55	---	---
Sonoma.....	73.01	---	---	978,905 00	---	7,024 47	17,175 02	Nov. 26, 1889.
<i>Southern Pacific Railroad.</i>	1,493.77	10,041 70	15,000,000 00	---	108,300 00	---	---	---
Alameda.....	1.40	---	---	14,058 00	---	102 34	---	---
Calaveras.....	.66	---	---	6,628 00	---	81 39	---	---
Contra Costa.....	36.10	---	---	362,506 00	---	2,457 79	---	---
Fresno.....	84.13	---	---	844,809 00	---	6,572 59	---	---
Kern.....	163.47	---	---	1,541,101 00	---	15,842 51	---	---
Los Angeles.....	193.08	---	---	1,938,852 00	---	20,288 38	---	---
Orange.....	23.78	---	---	238,792 00	---	2,151 72	---	---
Monterey.....	125.70	---	---	1,292,243 00	---	9,820 25	---	---
San Benito.....	17.65	---	---	177,236 00	---	1,894 03	---	---
San Bernardino.....	261.47	---	---	2,625,605 00	---	20,356 07	---	---
San Diego.....	158.85	---	---	1,595,125 00	---	22,778 38	---	---
San Francisco.....	7.36	---	---	73,907 00	---	739 07	---	---
San Joaquin.....	52.11	---	---	523,273 00	---	3,519 59	---	---
San Luis Obispo.....	33.25	---	---	333,887 00	---	2,461 52	---	---
San Mateo.....	25.10	---	---	252,047 00	---	1,634 05	---	---
Santa Barbara.....	27.10	---	---	271,126 00	---	1,860 82	---	---
Santa Clara.....	67.10	---	---	673,708 00	---	4,736 85	---	---
Santa Cruz.....	27.15	---	---	272,632 00	---	3,111 57	---	---
Stanislaus.....	36.36	---	---	365,116 00	---	2,365 95	---	---
Tulare.....	107.55	---	---	1,079,986 00	---	7,302 22	---	---
Ventura.....	54.50	---	---	547,273 00	---	6,133 07	244,880 16	Dec. 30, 1889.
<i>Northern Railway</i>	385.25	9,085 00	3,500,000 00	---	25,270 00	---	---	---
Alameda.....	10.80	---	---	96,393 00	---	559 82	---	---

Amador -----	8.00	-----	-----	72,680 00	-----	783 49
Calaveras-----	9.80	-----	-----	89,033 00	-----	1,003 32
Culusa-----	79.61	-----	-----	723,258 00	-----	4,885 15
Contra Costa-----	23.75	-----	-----	215,769 00	-----	1,438 05
El Dorado-----	30.55	-----	-----	277,547 00	-----	4,240 91
Napa-----	6.43	-----	-----	58,417 00	-----	571 31
Sacramento-----	48.75	-----	-----	442,894 00	-----	3,388 93
San Joaquin-----	29.80	-----	-----	270,733 00	-----	1,835 56
Solano-----	33.45	-----	-----	303,894 00	-----	2,381 50
Sonoma-----	30.52	-----	-----	277,274 00	-----	2,003 05
Tehama-----	17.29	-----	-----	157,080 00	-----	1,614 78
Yolo-----	56.80	-----	-----	516,028 00	-----	4,014 69
Carson and Colorado Railroad.	107.62	-----	2,137 14	230,000 00	1,630 60	54,080 56
Inyo-----	74.25	-----	-----	158,683 00	-----	2,821 38
Mono-----	33.37	-----	-----	71,317 00	-----	1,446 30
Nevada County Narrow Gauge R. R.	22.50	-----	4,444 44	100,000 00	722 00	5,928 28
Nevada-----	18.78	-----	-----	83,467 00	-----	2,366 43
Placer-----	3.72	-----	-----	16,533 00	-----	Dec. 28, 1889.
North Pacific Coast Railroad.	70.25	-----	5,195 72	365,000 00	2,685 30	5,145 97
Marin-----	51.75	-----	-----	268,879 00	-----	Dec. 24, 1889.
Sonoma-----	18.50	-----	-----	96,121 00	-----	689 76
Pacific Coast Railway.	76.10	-----	5,387 64	410,000 00	2,900 20	1,848 28
San Luis Obispo-----	39.50	-----	-----	212,812 00	-----	1,435 52
Santa Barbara-----	36.60	-----	-----	197,188 00	-----	Dec. 30, 1889.
South Pacific Coast Railway	84.86	-----	15,024 74	1,275,000 00	9,205 50	19,613 40
Alameda-----	31.46	-----	-----	472,679 00	-----	3,059 77
Santa Clara-----	27.40	-----	-----	411,678 00	-----	2,876 67
Santa Cruz-----	26.00	-----	-----	390,643 00	-----	4,471 96
Nevada and California Railroad	41.86	-----	2,006 68	84,000 00	606 48	1,654 87
Lassen-----	38.60	-----	-----	77,458 00	-----	Dec. 28, 1889.
Sierra-----	3.26	-----	-----	6,642 00	-----	135 94
Northern California Railroad	25.50	-----	4,826 25	125,000 00	902 50	2,189 04
Butte-----	13.90	-----	-----	67,065 00	-----	Dec. 30, 1889.
Yuba-----	12.00	-----	-----	57,915 00	-----	731 08
Atlantic and Pacific Railroad	242.51	-----	350 50	85,000 00	613 70	1,306 22
Kern-----	35.64	-----	-----	12,492 00	-----	Dec. 16, 1889.
San Bernardino-----	206.87	-----	-----	72,508 00	-----	564 11

STATEMENT No. 11—Continued.

NAMES OF RAILROADS ASSESSED AND OF COUNTIES RECEIVING APPOINTMENT.	Number of Miles of each Railroad operated in the State	Number of Miles of each Railroad in each County	Assessed Value per Mile.	Total Assessed Valuation.	Value Apportioned to each County.	Amount of Tax for State Purposes.	Amount of Tax for County Purposes.	Total State and County Taxes.	When Paid.
<i>Pullman Palace Car Company</i>									
Alameda (Central Pacific R. R.)	\$746.76	83.14	\$13.89	\$10,000 00	\$1,113 00	\$72 20	\$7 19		
Butte (Central Pacific R. R.)		45.00			603 00		4 99		
Fresno (Central Pacific R. R.)		60.13			805 00		6 22		
Merced (Central Pacific R. R.)		36.75			492 00		4 97		
Nevada (Central Pacific R. R.)		30.25			405 00		6 89		
Placer (Central Pacific R. R.)		112.75			1,510 00		19 94		
Sacramento (Central Pacific R. R.)		41.00			549 00		4 18		
San Francisco (Central Pac. R. R.)		2.46			33 00		33		
San Joaquin (Central Pac. R. R.)		56.75			760 00		5 10		
Santa Clara (Central Pacific R. R.)		8.50			114 00		77		
Shasta (Central Pacific Railroad)		82.08			1,099 00		19 97		
Sierra (Central Pacific Railroad)		2.15			29 00		60		
Siskiyou (Central Pacific R. R.)		83.18			1,114 00		8 66		
Stanislaus (Central Pacific R. R.)		22.63			303 00		1 92		
Sutter (Central Pacific Railroad)		10.00			134 00		81		
Tehama (Central Pacific R. R.)		40.54			543 00		5 56		
Tulare (Central Pacific Railroad)		13.58			182 00		1 23		
Yuba (Central Pacific Railroad)		15.87			212 00		2 65		
			7 56	4,652 00		33 58		\$174 28	Delinquent.
<i>Pullman Palace Car Company</i>	615.20								
Alameda (Northern Railway)		6.85			52 00		29		
Alameda (Southern Pacific R. R.)		1.40			10 00		07		
Contra Costa (Northern Railway)		23.75			180 00		1 20		
Contra Costa (Southern Pac. R. R.)		36.10			273 00		1 85		
San Joaquin (Southern Pac. R. R.)		8.50			64 00		43		
San Joaquin (Central Pac. R. R.)		22.00			166 00		1 12		
Stanislaus (Central Pacific R. R.)		22.63			171 00		1 10		
Merced (Central Pacific Railroad)		36.75			278 00		2 81		
Fresno (Central Pacific Railroad)		60.13			455 00		3 51		
Tulare (Central Pacific Railroad)		13.58			103 00		70		
Tulare (Southern Pacific R. R.)		39.50			299 00		2 02		

Kern (Southern Pacific Railroad). San Bernardino (Sou'th Pac.R.R.)	137 14 206 87	----- -----	----- -----	----- -----	1,037 00 1,564 00	----- -----	----- -----	10 66 12 16	71 50	Delinquent. -----
Totals	3,963.38	----- 3,963.38	----- \$40,488,652 00	----- \$40,488,652 00	----- \$40,488,652 00	----- \$292,328 06	----- \$375,699 09	----- \$668,027 15	----- \$668,027 15	----- -----

NOTE.—The assessments against the Atlantic and Pacific Railroad Company and the Pullman Palace Car Company, are for rolling stock used on the various railroads as shown in statement; therefore, the mileage set opposite these companies does not figure in the total mileage of roads operated.

STATEMENT No. 12.

Values of Property and Amounts Charged to Tax Collectors for the Year 1888 (Exclusive of the Value of Railroads, Assessed by the State Board of Equalization, and Taxes Due Thereon).

COUNTIES.	Value of Real Estate and Improvements.	Value of Personal Property and Amount of Money.	Total Value of Property, Exclusive of Railroads Assessed by the State Board of Equalization.	Amount of Taxes for State Purposes, Rate, .504 on Each \$100.	Amount of Taxes for County Purposes.	Total Amount of Taxes Charged to Tax Collectors.
Alameda	\$58,150,422 00	\$6,496,489 00	\$64,646,911 00	\$325,820 43	\$288,325 23	\$614,145 66
Alpine	221,095 00	54,774 00	275,869 00	1,300 37	6,609 77	8,000 14
Amador	3,634,200 00	748,287 00	4,382,487 00	22,086 93	43,647 99	65,734 92
Butte	16,636,287 00	2,687,414 00	19,323,701 00	97,441 85	159,295 27	256,737 12
Calaveras	3,250,895 00	930,868 00	4,181,763 00	21,076 10	50,013 88	71,089 98
Colusa	20,540,085 00	3,237,041 00	23,777,126 00	119,880 93	162,043 92	281,880 63
Contra Costa	11,717,800 00	3,153,403 00	14,871,203 00	74,980 86	93,756 62	168,707 48
Del Norte	1,566,217 00	305,343 00	1,871,560 00	9,432 66	23,319 64	32,752 30
El Dorado	2,691,670 00	900,395 00	3,592,065 00	18,104 01	55,533 32	73,637 33
Fresno	29,611,369 00	3,692,386 00	33,303,755 00	167,850 92	200,440 17	368,291 09
Humboldt	14,434,963 00	3,323,773 00	17,758,736 00	89,504 03	168,379 53	257,883 56
Inyo	870,880 00	489,114 00	1,359,994 00	6,854 34	27,145 51	33,999 85
Kern	6,803,511 00	2,193,313 00	8,996,824 00	45,343 89	94,106 78	139,450 77
Lake	2,981,945 00	700,986 00	3,682,931 00	18,561 97	41,838 09	60,400 06
Lassen	1,481,509 00	1,063,797 00	2,545,306 00	12,828 35	35,532 46	48,360 81
Los Angeles	90,104,253 00	9,489,756 00	99,594,009 00	501,953 80	575,715 40	1,077,669 20
Marin	9,225,561 00	1,279,961 00	10,505,522 00	52,947 83	78,371 19	131,319 02
Mariposa	1,416,168 00	463,812 00	1,879,980 00	9,475 10	38,652 39	48,127 49
Mendocino	9,113,317 00	2,176,587 00	11,289,904 00	56,901 11	132,049 30	188,950 71
Merced	12,571,345 00	1,607,942 00	14,179,287 00	71,463 60	141,225 70	212,689 30
Modoc	1,615,169 00	1,459,105 00	3,074,274 00	15,493 88	30,618 83	46,112 71
Mono	659,113 00	257,114 00	916,227 00	4,617 78	15,997 32	20,615 10
Monterey	11,606,612 00	2,335,390 00	13,941,992 00	70,267 65	138,862 25	209,129 90
Nevada	10,809,665 00	2,716,549 00	13,526,214 00	68,172 12	117,973 86	186,145 98
Napa	4,415,380 00	1,260,765 00	5,676,145 00	28,607 77	83,763 70	112,371 47
Placer	6,351,931 00	1,464,689 00	7,816,620 00	39,395 76	86,924 32	126,320 08
Plumas	1,706,732 00	633,846 00	2,340,578 00	11,796 51	46,717 90	58,514 41
Sacramento	27,177,345 00	5,606,270 00	32,783,615 00	165,229 42	162,606 73	327,836 15
San Benito	4,854,340 00	1,189,460 00	6,023,800 00	30,359 95	61,387 80	91,747 75
San Bernardino	19,413,260 00	2,469,325 00	21,882,585 00	109,985 82	140,844 59	250,830 41
San Diego	34,284,439 00	4,188,979 00	38,473,418 00	193,911 06	314,668 03	508,579 09
San Francisco	211,467,987 00	61,921,629 00	273,389,616 00	1,377,883 67	2,917,067 20	4,294,950 87

San Joaquin	32,043,407 00	4,917,921 00	36,961,328 00	186,285 09	201,356 60	387,641 69
San Luis Obispo	11,786,995 00	2,513,935 00	14,300,930 00	72,076 68	122,153 95	194,230 63
San Mateo	11,915,540 00	1,442,810 00	13,358,350 00	67,326 08	91,401 67	158,727 75
Santa Barbara	17,797,317 00	1,859,413 00	19,656,730 00	99,069 92	97,497 38	196,567 30
Santa Clara	46,441,323 00	5,195,380 00	51,636,903 00	260,249 99	220,800 12	481,050 11
Santa Cruz	8,787,755 00	1,353,200 00	10,140,955 00	51,110 41	89,125 18	140,235 59
Shasta	3,773,395 00	1,107,968 00	4,881,363 00	24,602 07	73,025 19	97,627 26
Sierra	1,298,609 00	410,015 00	1,708,624 00	8,586 27	37,411 58	45,997 85
Siskiyou	3,342,012 00	1,763,261 00	5,105,273 00	25,730 57	50,845 15	76,575 72
Solano	16,119,639 00	3,002,247 00	19,121,886 00	96,374 30	161,771 16	258,145 46
Sonoma	24,687,335 00	4,365,677 00	29,053,012 00	146,427 18	169,080 61	315,507 79
Stanislaus	12,743,064 00	2,170,564 00	14,913,628 00	75,164 68	87,288 02	162,452 70
Sutter	8,565,364 00	1,267,692 00	9,832,456 00	49,555 57	48,768 99	98,324 56
Tehama	8,984,279 00	1,850,386 00	10,834,665 00	54,906 70	106,315 95	160,992 65
Trinity	777,670 00	372,019 00	1,149,689 00	5,794 43	28,696 24	34,490 67
Tulare	19,907,792 00	3,227,553 00	23,135,105 00	116,600 92	134,824 10	251,425 02
Tuolumne	1,948,001 00	624,888 00	2,572,889 00	12,967 36	35,659 80	48,607 16
Ventura	7,113,505 00	1,416,877 00	8,530,382 00	42,993 12	70,435 11	113,428 23
Yolo	16,766,058 00	2,590,690 00	19,356,748 00	97,558 00	139,494 94	237,052 94
Yuba	5,257,105 00	1,392,010 00	6,649,115 00	33,511 54	78,368 05	111,879 59
Totals	\$891,416,590 00	\$173,273,458 00	\$1,064,710,048 00	\$5,366,137 23	\$8,577,734 78	\$13,943,872 01

TOTAL VALUES OF ALL PROPERTY, AND AMOUNT OF TAXES LEVIED FOR THE YEAR 1888.

Total assessments of local Assessors	\$1,064,710,048 00
Total assessments by State Board of Equalization (railroads)	43,242,652 00
Total value of all property	\$1,107,952,700 00
Total taxes charged by Auditors for State purposes	\$5,366,137 23
Total taxes charged by Controller for State purposes (railroads)	217,942 96
Total taxes for State purposes	\$5,584,080 19
Total taxes charged by Auditors for county purposes	8,577,734 78
Total taxes charged by Controller for county purposes (railroads)	370,681 89
Total State and county taxes due for the year 1888	\$13,532,496 82

STATEMENT No. 13.

Values of Property and Amounts Charged to Tax Collectors for the Year 1889 (Exclusive of the Value of Railroads, Assessed by the State Board of Equalization, and Taxes Due Thereon).

COUNTIES.	Value of Real Estate and Improvements.	Value of Personal Property and Amount of Money.	Total Value of Property, Exclusive of Railroads Assessed by the State Board of Equalization.	Amount of Taxes for State Purposes, Rate, .722 on each \$100.	Amount of Taxes Charged to Tax Collectors.	Total Amount of Taxes Charged to Tax Collectors.
Alameda.....	\$63,179,737 00	\$6,685,794 00	\$69,865,531 00	\$504,429 13	\$362,456 42	\$866,885 55
Alpine.....	220,561 00	62,274 00	282,835 00	2,042 07	6,442 98	8,485 05
Amador.....	3,511,800 00	697,489 00	4,209,289 00	30,391 06	45,376 12	75,767 18
Butte.....	17,109,876 00	2,769,504 00	19,879,380 00	143,827 67	159,483 00	303,010 67
Calaveras.....	3,348,335 00	871,465 00	4,219,800 00	30,466 95	51,819 14	82,286 09
Colusa.....	20,580,815 00	3,061,922 00	23,642,737 00	170,700 56	155,839 80	326,540 36
Contra Costa.....	12,136,537 00	2,479,327 00	14,615,864 00	105,626 53	97,147 08	202,673 61
Del Norte.....	1,587,976 00	337,085 00	1,925,061 00	13,898 94	23,462 32	37,361 26
El Dorado.....	2,763,690 00	848,650 00	3,612,340 00	26,008 89	55,043 76	81,052 65
Fresno.....	30,112,433 00	3,381,896 00	33,494,329 00	241,829 06	250,530 19	492,359 25
Humboldt.....	15,219,689 00	3,221,183 00	18,440,872 00	133,143 10	153,136 02	286,279 12
Inyo.....	897,657 00	492,355 00	1,390,012 00	10,635 89	24,714 41	34,750 30
Kern.....	8,027,577 00	2,249,577 00	10,277,150 00	74,201 02	105,649 10	179,850 12
Lake.....	3,362,622 00	659,862 00	4,022,484 00	29,042 23	42,382 26	71,424 49
Lassen.....	1,568,777 00	881,214 00	2,449,991 00	17,688 93	28,860 89	46,549 82
Los Angeles.....	74,108,062 00	7,911,489 00	82,019,551 00	592,181 16	711,323 83	1,303,504 99
Marin.....	9,358,740 00	1,259,943 00	10,618,683 00	76,666 89	71,994 67	148,661 56
Mariposa.....	1,469,219 00	380,422 00	1,849,641 00	13,354 41	32,516 69	45,871 10
Mendocino.....	9,750,101 00	2,194,164 00	11,944,265 00	86,237 59	147,022 71	233,260 30
Merced.....	11,971,478 00	1,534,833 00	13,506,311 00	97,615 56	132,612 18	230,127 74
Modoc.....	1,690,119 00	1,302,965 00	2,993,084 00	21,610 06	30,765 70	52,375 76
Mono.....	622,535 00	247,158 00	869,693 00	6,279 18	17,637 37	23,916 55
Monterey.....	11,895,585 00	2,378,209 00	14,273,794 00	103,056 79	111,050 12	214,106 91
Napa.....	11,120,706 00	2,879,947 00	14,000,653 00	101,084 72	123,532 36	224,617 08
Nevada.....	4,361,100 00	1,333,510 00	5,694,610 00	41,115 08	91,344 18	132,459 26
Orange.....	7,519,135 00	1,126,889 00	8,646,024 00	62,424 29	86,461 33	148,885 62
Placer.....	6,652,760 00	1,484,444 00	8,137,204 00	58,750 61	105,157 18	163,907 79
Plumas.....	1,761,039 00	548,402 00	2,309,441 00	16,674 16	41,061 86	57,736 02
Sacramento.....	27,857,900 00	5,433,970 00	33,291,870 00	240,367 30	175,781 07	416,148 37
San Benito.....	4,965,650 00	1,190,025 00	6,155,675 00	44,443 97	63,993 41	108,437 38
San Bernardino.....	17,554,625 00	2,135,696 00	19,690,321 00	142,164 11	134,338 34	277,102 45
San Diego.....	25,640,818 00	3,406,799 00	29,047,617 00	209,723 80	357,389 98	567,113 78

San Francisco*	229,064,423 00	62,519,245 00	291,583,668 00	2,105,234 08	3,060,414 40	5,165,648 48
San Joaquin	32,080,157 00	4,939,518 00	37,019,675 00	267,282 05	123,602 56	500,884 61
San Luis Obispo	12,135,295 00	2,457,123 00	14,592,418 00	105,357 25	123,361 19	228,718 44
San Mateo	12,262,645 00	1,374,195 00	13,636,840 00	98,457 97	83,815 52	182,273 49
Santa Barbara	13,641,222 00	1,779,092 00	15,420,314 00	111,334 67	97,216 27	208,550 94
Santa Clara	46,423,570 00	5,455,529 00	51,879,099 00	374,567 09	319,335 04	693,902 13
Santa Cruz	9,081,275 00	1,415,680 00	10,496,955 00	75,788 01	107,033 88	182,821 89
Shasta	4,040,230 00	1,123,781 00	5,164,011 00	37,284 16	75,853 07	113,137 23
Sierra	1,279,910 00	355,479 00	1,635,389 00	11,807 50	33,983 38	46,790 88
Siskiyou	3,685,477 00	1,831,374 00	5,516,851 00	39,831 66	42,389 78	82,221 44
Solano	16,331,135 00	2,656,132 00	18,987,267 00	137,102 50	144,503 91	281,006 41
Sonoma	25,498,096 00	4,372,275 00	29,870,371 00	215,664 08	203,566 79	419,230 87
Stanislaus	13,347,996 00	2,174,196 00	15,522,192 00	112,070 22	98,064 50	210,734 72
Butter	8,628,756 00	1,276,893 00	9,905,649 00	71,518 79	60,226 34	131,745 13
Tehama	9,181,390 00	1,856,500 00	11,037,890 00	79,693 56	111,146 94	190,840 50
Trinity	793,488 00	359,856 00	1,153,344 00	8,327 15	26,273 17	34,600 32
Tulare	20,064,785 00	3,061,250 00	23,126,035 00	166,969 97	152,828 73	319,798 70
Tuolumne	2,040,840 00	675,625 00	2,716,465 00	19,612 87	35,734 83	55,347 70
Ventura	6,528,781 00	1,522,878 00	8,051,659 00	58,132 98	85,038 10	143,171 08
Yolo	17,103,691 00	2,596,717 00	19,700,408 00	142,280 26	149,068 14	291,338 40
Yuba	5,303,675 00	1,408,240 00	6,711,915 00	48,460 03	81,497 56	129,957 59
Totals	\$900,440,491 00	\$170,661,836 00	\$1,071,102,327 00	\$7,733,358 56	\$9,322,470 57	\$17,055,829 13

* This value is for State purposes only. The county taxes are computed on a valuation of \$306,041,440. The State Board of Equalization reduced the assessment-roll 5 per cent, such reduction applying only to the valuation for State purposes.

TOTAL VALUES OF ALL PROPERTY, AND AMOUNT OF TAXES LEVIED FOR THE YEAR 1889.

Total assessments by local Assessors	\$1,071,102,327 00
Total assessments by State Board of Equalization (railroads)	40,448,652 00
Total value of all property	\$1,111,550,979 00
Total taxes charged by Auditors for State purposes	\$7,733,358 56
Total taxes charged by Controller for State purposes (railroads)	292,328 06
Total taxes for State purposes	\$8,025,686 62
Total taxes charged by Auditors for county purposes	9,322,470 57
Total taxes charged by Controller for county purposes (railroads)	375,689 09
Total State and county taxes due for the year 1889	\$17,723,846 28

STATEMENT No. 14.

Delinquent Taxes Charged to Tax Collectors for the Year 1888 (being Exclusive of the Delinquent Taxes due upon Railroads, Assessed by the State Board of Equalization).

COUNTIES.	Value of Real Estate and Improvements Delinquent for Taxes.	Value of Personal Property, including Money, Delinquent for Taxes.	Delinquent Tax on Real Estate for State Purposes.	Delinquent Tax on Personal Property, including Money, for State Purposes.	Total Delinquent Tax for State Purposes.
Alameda	\$1,947,507 00	\$214,020 00	\$9,815 44	\$1,078 66	\$10,894 10
Alpine	36,436 00	4,021 00	183 64	20 27	203 91
Amador	226,489 00	33,490 00	1,141 42	168 77	1,310 19
Butte	274,552 00	39,113 00	1,333 75	297 92	1,631 67
Calaveras	279,033 00	44,000 00	1,386 67	218 69	1,605 36
Colusa	247,820 00	48,050 00	1,249 01	242 17	1,491 18
Contra Costa	308,532 00	47,663 00	1,555 00	240 21	1,795 21
Del Norte	12,250 00	3,998 00	21 74	20 15	41 89
El Dorado	353,065 00	61,850 00	1,779 45	311 72	2,091 17
Fresno	2,153,617 00	297,729 00	10,854 23	1,500 55	12,354 78
Humboldt	513,561 00	91,768 00	2,588 35	462 51	3,050 86
Inyo	151,469 00	43,582 00	417 43	120 13	537 56
Kern	274,336 00	57,429 00	1,382 65	289 44	1,672 09
Lake	197,295 00	26,976 00	994 37	135 96	1,130 33
Lassen	154,726 00	98,355 00	779 81	495 70	1,275 51
Los Angeles	11,154,232 00	994,920 00	56,217 33	5,014 40	61,231 73
Marin	371,332 00	31,185 00	1,871 51	151 17	2,028 68
Mariposa	178,980 00	33,329 00	902 05	167 98	1,070 03
Mendocino*					
Mered	150,467 00	26,963 00	788 32	135 89	894 21
Modoc	102,269 00	84,952 00	515 43	428 16	943 59
Mono	41,891 00	13,369 00	211 13	67 38	278 51
Monterey	329,150 00	131,225 00	1,658 91	661 37	2,320 28
Napa*					
Nevada	267,840 00	37,040 00	1,349 91	186 68	1,536 59
Placer	328,902 00	151,550 00	1,012 70	466 22	1,478 92
Plumas	253,572 00	39,194 00	1,278 00	197 54	1,475 54
Sacramento	649,945 00	79,825 00	3,275 72	402 31	3,678 03
San Benito	68,155 00	38,590 00	343 50	194 49	537 99
San Bernardino	2,889,315 00	412,085 00	14,562 14	2,076 90	16,639 04
San Diego	6,987,975 00	628,443 00	35,359 15	3,179 92	38,539 07
San Francisco	4,991,055 00	9,263,125 00	25,154 91	46,686 15	71,841 06

San Joaquin.....	251,631 00	58,786 00	1,208 22	206 28	1,564 50
San Luis Obispo*					
San Mateo*	485,210 00	50,505 00	2,445 45	253 53	2,698 98
Santa Barbara.....	957,328 00	66,209 00	4,824 93	333 69	5,158 62
Santa Clara.....	163,245 00	24,050 00	772 34	121 20	893 54
Santa Cruz.....	420,555 00	93,445 00	2,119 60	470 96	2,590 56
Shasta.....	127,589 00	36,900 00	643 04	185 98	829 02
Sierra.....	222,603 00	80,803 00	1,121 92	407 24	1,592 16
Siskiyou.....	247,711 00	35,794 00	1,248 46	180 39	1,428 85
Solano.....	466,060 00	110,738 00	2,348 95	558 12	2,507 07
Sonoma.....					
Stanislaus*	14,934 00	7,522 00	75 26	37 91	113 17
Sutter.....	296,400 00	46,680 00	1,493 85	235 27	1,729 13
Tehama.....	47,973 00	201 47	241 78	101 54	343 32
Trinity.....	1,337,504 00	249,393 00	6,741 02	1,308 73	8,049 75
Tulare.....	80,685 00	20,923 00	890 89	104 10	994 99
Tuolumne.....	167,743 00	36,534 00	845 43	184 12	1,029 55
Ventura.....					
Yolo*	82,198 00	47,445 00	414 28	239 12	653 40
Yuba.....					
Totals.....	\$41,093,707 00	\$14,063,577 47	\$207,539 09	\$70,637 59	\$279,924 13

* No Auditors' reports have been received at this office from Mendocino, San Luis Obispo, San Mateo, Stanislaus, and Yolo Counties; and Napa only as to the delinquency for State purposes.

STATEMENT No. 15.

Delinquent Taxes Charged to Tax Collectors for the Year 1889 (being Exclusive of the Delinquent Taxes due upon Railroads, Assessed by the State Board of Equalization).

COUNTIES.	Value of Real Estate and Improvements Delinquent for Taxes.	Value of Personal Property, including Money, Delinquent for Taxes.	Delinquent Tax on Real Estate for State Purposes.	Delinquent Tax on Personal Property, including Money, for State Purposes.	Total Delinquent Tax for State Purposes.
Alameda	\$2,042,551 00	\$522,892 00	\$14,747 07	\$3,775 28	\$18,522 35
Alpine	38,431 00	500 00	277 48	3 61	281 09
Amador	285,867 00	34,695 00	2,063 95	250 47	2,314 42
Butte	580,114 00	56,530 00	4,188 42	408 15	4,596 57
Calaveras	343,208 00	69,633 00	2,477 96	502 75	2,980 71
Colusa	275,190 00	37,860 00	1,986 87	273 35	2,260 22
Contra Costa	326,625 00	164,188 00	2,358 23	1,185 44	2,543 67
Del Norte	18,321 00	4,350 00	132 28	21 41	153 69
El Dorado	239,405 00	61,830 00	1,728 50	446 41	2,174 91
Fresno	2,079,671 00	340,356 00	15,015 23	2,596 19	17,611 42
Humboldt	441,742 00	122,711 00	3,189 38	885 97	4,075 35
Inyo	184,199 00	68,829 00	1,177 54	440 04	1,617 58
Kern	430,784 00	121,306 00	3,110 26	875 83	3,986 09
Lake	230,898 00	37,675 00	1,667 08	272 02	1,939 10
Lassen	177,028 00	64,875 00	1,278 14	468 39	1,746 53
Los Angeles*	7,929,495 00	22,148 00	1,195 06	159 91	57,250 95
Marin	165,521 00	21,172 00	435 39	61 63	1,354 97
Mariposa	149,552 00	155,218 00	2,986 18	560 33	3,546 51
Mendocino	827,197 00	169,694 00	1,407 50	432 07	1,839 57
Merced	194,947 00	162,305 00	1,235 40	1,168 59	2,303 99
Modoc	157,257 00	22,299 00	905 38	161 00	1,066 38
Mono	125,399 00	120,365 00	2,855 20	860 02	3,724 22
Monterey	395,458 00	178,805 00	2,129 59	1,290 97	3,420 56
Napa*	294,555 00	77,870 00	4,283 55	562 22	4,845 77
Nevada	593,290 00	67,815 00	3,335 48	489 62	3,825 10
Orange	461,979 00	37,439 00	1,724 98	270 31	1,995 29
Placer	238,918 00	86,885 00	3,527 07	627 30	4,154 37
Plumas	488,515 00	29,140 00	753 58	210 38	963 96
Sacramento	104,375 00	277,822 00	15,842 75	1,994 24	17,836 99
San Benito	2,195,404 00	1,040,702 00	34,587 11	5,204 20	39,791 31
San Bernardino	4,790,459 00	8,515,040 00	33,794 41	68,478 72	102,273 13
San Diego					
San Francisco	4,680,665 00				

San Joaquin.....	499,321 00	231,069 00	3,605 10	813 83	4,418 93
San Luis Obispo*					4,341 16
San Mateo*					3,985 99
Santa Barbara.....	494,290 00	57,510 00	3,568 77	415 22	7,119 44
Santa Clara*					1,691 95
Santa Cruz.....	194,130 00	71,630 00	1,396 77	295 18	3,188 55
Shasta.....	361,425 00	80,202 00	2,609 49	579 06	1,249 85
Sierra.....	154,565 00	18,545 00	1,115 96	133 89	1,588 47
Siskiyou.....	219,210 00	103,799 00	1,058 09	530 38	3,276 86
Solano.....	373,779 00	80,081 00	2,698 68	578 18	5,986 49
Sonoma.....	586,266 00	242,888 00	4,232 84	1,753 65	3,610 12
Stanislaus.....	349,815 00	150,203 00	2,525 65	1,084 46	100 16
Sutter.....	36,329 00	13,874 00	262 29	100 16	362 45
Tehama.....	438,996 00	63,711 00	3,169 33	459 99	3,629 32
Trinity.....	52,375 00	13,748 00	378 15	99 26	477 41
Tulare.....	1,351,890 00	730,061 00	9,760 64	3,645 61	13,406 25
Tuolumne.....	209,820 00	29,026 00	1,469 71	206 97	1,676 68
Ventura.....	96,435 00	154,713 00	696 26	276 48	972 74
Yolo.....	388,031 00	172,120 00	2,801 58	1,242 71	4,044 29
Yuba.....	62,560 00	36,381 00	451 68	262 66	714 34
Totals.....	\$37,356,937 00	\$14,942,860 00	\$208,178 02	\$107,423 51	\$386,263 92

* No Auditors' reports have been received at this office from San Mateo County; and from Los Angeles, Napa, San Luis Obispo, and Santa Clara Counties only as to the delinquency for State purposes.

STATEMENT No. 16.

Amounts of State Tax Levied, Amounts Collected, and Amounts Delinquent in the several Counties for and on account of Property Tax (Tax of 1888), on the thirtieth day of June, 1889.

COUNTIES.	Amounts Levied.	Amounts Collected.	Amounts Delinquent.
Alameda	\$325,820 43	\$325,546 59	\$273 84
Alpine	1,390 37	1,273 24	117 13
Amador	22,086 93	21,780 17	306 76
Butte	97,441 85	97,354 25	87 60
Calaveras	21,076 10	20,590 56	485 54
Colusa	119,836 71	119,769 41	67 30
Contra Costa	74,950 86	74,557 78	393 08
Del Norte	9,432 66	9,416 87	15 79
El Dorado	18,104 01	17,901 99	202 02
Fresno	167,850 92	164,629 51	3,221 41
Humboldt	89,504 03	88,902 79	601 24
Inyo	6,854 34	6,357 38	496 96
Kern	45,343 99	44,030 62	1,313 37
Lake	18,561 97	18,056 82	505 15
Lassen	12,823 35	12,593 83	234 52
Los Angeles	501,953 80	482,207 97	19,745 83
Marin*	52,947 83	53,676 07	
Mariposa	9,475 10	9,062 65	412 45
Mendocino	56,901 11	55,284 51	1,616 60
Merced	71,463 60	69,880 23	1,583 37
Modoc	15,493 88	15,173 24	320 64
Mono	4,617 78	4,529 94	87 84
Monterey	70,267 65	69,728 22	539 43
Napa	68,172 12	68,004 67	167 45
Nevada	28,607 77	28,381 24	226 53
Placer	39,395 76	38,820 65	575 11
Plumas	11,796 51	11,036 41	760 10
Sacramento	165,229 42	164,958 01	271 41
San Benito	30,359 95	30,236 44	123 51
San Bernardino	109,985 82	105,148 78	4,837 04
San Diego	193,911 06	177,996 84	15,914 22
San Francisco	1,377,883 67	1,347,141 91	30,741 76
San Joaquin	186,285 09	185,783 45	501 64
San Luis Obispo	72,076 68	69,725 96	2,350 72
San Mateo	67,326 08	66,801 08	525 00
Santa Barbara	99,069 92	98,456 51	613 41
Santa Clara	260,249 99	259,567 87	682 12
Santa Cruz	51,110 41	50,635 85	474 56
Shasta	24,602 07	23,820 93	781 14
Sierra	8,586 27	8,326 69	259 58
Siskiyou	25,730 57	25,154 66	575 91
Solano	96,374 30	93,751 29	2,623 01
Sonoma	146,427 18	146,274 38	152 80
Stanislaus	75,164 68	73,325 86	1,838 82
Sutter	49,555 57	48,684 52	871 05
Tehama	54,606 70	54,269 48	337 22
Trinity	5,794 43	5,618 23	176 20
Tulare	116,600 92	113,392 28	3,208 64
Tuolumne	12,967 36	12,673 60	293 76
Ventura	42,993 12	42,906 77	86 35
Yolo	97,558 00	97,440 65	117 35
Yuba	33,511 54	33,456 63	54 91
Totals	\$5,366,137 23	\$5,264,096 28	\$102,769 13

* It will be seen from the foregoing statement that the county of Marin has collected more property tax than was originally due. I account for it by reason of the excess collected by the Assessor, and that in some instances property tax of other years has been reported as property tax of this year.

STATEMENT No. 17.

Amounts of State Tax Levied, Amounts Collected, and Amounts Delinquent in the Several Counties for and on account of Property Tax (Tax of 1889), on the thirtieth day of June, 1890.

COUNTIES.	Amounts Levied.	Amounts Collected.	Amounts Delinquent.
Alameda	\$504,429 13	\$499,846 19	\$4,582 49
Alpine	2,042 07	1,211 80	830 27
Amador	30,391 06	29,929 24	461 82
Butte	143,527 67	143,362 55	165 12
Calaveras	30,466 95	29,823 71	643 24
Colusa	170,700 56	170,219 22	481 34
Contra Costa	105,526 53	103,527 37	1,999 16
Del Norte	13,898 94	13,875 65	23 29
El Dorado	26,008 89	24,621 99	1,386 90
Fresno	241,829 06	238,689 75	3,139 31
Humboldt	133,143 10	128,714 27	4,428 83
Inyo	10,035 89	8,407 04	1,628 85
Kern	74,201 02	72,516 67	1,684 35
Lake	29,042 23	28,939 90	102 33
Lassen*	17,688 93	17,958 85	-----
Los Angeles	592,181 16	580,819 63	11,361 53
Marin	76,666 89	74,323 90	2,342 90
Mariposa	13,354 41	12,544 34	810 07
Mendocino	86,237 59	79,331 22	6,906 37
Merced	97,515 56	97,114 77	400 79
Modoc	21,610 06	20,016 64	1,593 42
Mono	6,279 18	6,219 88	59 30
Monterey	103,056 79	101,751 17	1,305 62
Napa	101,084 72	100,852 16	232 56
Nevada	41,115 08	40,683 17	431 91
Orange	62,424 29	56,547 59	5,876 70
Placer	58,750 61	58,123 50	627 11
Plumas	16,674 16	15,587 55	1,086 61
Sacramento	240,367 30	240,316 12	51 18
San Benito	44,443 97	43,529 99	913 98
San Bernardino	142,164 11	138,966 71	3,197 40
San Diego	209,723 80	193,135 94	16,587 86
San Francisco	2,105,234 08	2,023,056 30	82,177 78
San Joaquin	267,282 05	264,794 37	2,487 68
San Luis Obispo	105,357 25	100,396 01	4,961 24
San Mateo	98,457 97	98,014 85	443 12
Santa Barbara	111,334 67	110,310 69	1,023 98
Santa Clara	374,567 09	373,796 39	770 70
Santa Cruz	75,788 01	75,611 58	176 43
Shasta	37,284 16	35,974 05	1,310 11
Sierra	11,807 50	11,203 75	603 75
Siskiyou	39,831 60	38,827 19	1,004 47
Solano	137,102 50	136,309 34	793 16
Sonoma	215,664 08	215,153 55	510 53
Stanislaus	112,070 22	111,604 45	465 77
Sutter	71,518 79	71,365 58	153 21
Tehama	79,693 56	78,756 74	936 82
Trinity	8,327 15	7,849 54	477 61
Tulare	166,969 97	160,994 17	5,975 80
Tuolumne	19,612 87	17,933 89	1,678 98
Ventura	58,132 98	56,859 04	1,273 94
Yolo	142,280 26	141,873 53	406 73
Yuba	48,460 03	47,683 80	776 23
Totals	\$7,733,358 56	\$7,549,877 38	\$183,751 10

*It will be seen from the foregoing statement that the county of Lassen has collected more property tax than was originally due. I account for it by reason of the excess collected by the Assessor, and that in some instances property tax of other years has been reported as property tax for this year.

STATEMENT No. 19.

Commissions and Mileage for Assessing, Auditing, Collecting, and Paying in State Taxes for the Thirty-eighth Fiscal Year, commencing July 1, 1888, and ending June 30, 1889.

COUNTIES.	Assessor's Com- missions	Auditor's Com- missions	Treasurer's Com- missions and Mileage	Tax Collector's Commissions	Assessor's Com- missions as Collector on Personal Prop- erty	Total.
Alameda	\$2,759 38	\$2,688 59	\$6,232 93	\$4,314 90	\$538 12	\$16,533 92
Alpine	29 32	23 64	111 99	44 29	5 04	214 28
Amador	478 10	351 55	401 81	433 91	15 24	1,680 61
Butte	1,303 09	993 39	1,871 71	1,406 18	145 93	5,720 30
Calaveras	477 61	350 83	435 98	418 48	15 32	1,698 22
Colusa	1,459 97	1,172 69	2,344 06		145 22	5,121 94
Contra Costa	1,133 33	813 31	1,505 74	1,033 75	762 56	5,248 69
Del Norte	237 04	190 10	279 83	266 67		973 64
El Dorado	425 25	309 09	371 28	650 09	8 27	1,761 16
Fresno	1,725 91	1,496 96	3,213 01	2,309 08	120 48	8,865 44
Humboldt	1,254 88	933 98	1,864 75	1,206 70	75 04	5,335 35
Inyo	162 88	130 15	222 16	174 96	17 50	707 65
Kern	850 45	587 73	1,025 67	702 49	141 95	3,308 29
Lake	437 51	319 03	500 71	397 71	10 27	1,665 23
Lassen	352 34	258 14	483 84	334 14	25 70	1,454 14
Los Angeles	3,723 91	3,873 14	9,269 88	6,291 10	480 10	23,638 13
Marin	940 11	674 53	1,070 53	888 77	114 97	3,668 73
Mariposa	227 21	181 50	295 60	214 32	23 17	941 80
Mendocino	964 36	682 36	1,192 74	842 85	52 81	3,735 12
Merced	1,104 27	794 90	1,399 76	1,029 21	137 41	4,465 55
Modoc	377 07	276 75	383 55	385 53	28 70	1,451 60
Mono	110 13	88 38	187 91	148 07	7 77	542 26
Monterey	1,101 75	788 33	1,881 72	1,041 63	121 35	4,934 78
Napa	1,091 54	784 63	1,331 90	1,026 23	177 30	4,411 60
Nevada	640 41	432 70	625 66		79 38	1,778 15
Placer	781 28	532 59	751 54	642 56	21 10	2,729 07
Plumas	268 64	210 70	310 28	235 41	11 48	1,036 51
Sacramento	1,740 32	1,506 45	3,121 03	868 96	373 32	7,610 07
San Benito	658 98	448 97	703 08	553 02	51 43	2,415 48
San Bernardino	1,366 52	1,069 25	2,199 68	1,557 58	217 53	6,410 54
San Diego	1,950 85	1,745 35	3,952 57	1,346 70	553 85	9,549 32
San Francisco	27,488 85	6,669 85	10,325 99	11,582 36		56,067 05
San Joaquin	1,853 81	1,641 85	3,538 25	2,582 45	211 97	9,828 33
San Luis Obispo	1,108 73	798 27	1,517 52	1,053 48	198 64	4,676 64
San Mateo	1,072 99	770 23	1,330 00	1,072 51	39 22	4,284 95
Santa Barbara	1,310 34	1,002 15	2,040 72	1,456 57	90 93	5,900 71
Santa Clara	2,346 06	2,220 14	5,091 83		309 29	9,967 32
Santa Cruz	911 69	639 50	1,005 45	817 60	41 76	3,416 00
Shasta	543 38	385 56	584 98	444 76	20 95	1,979 63
Sierra	206 54	164 71	250 10	181 27	13 60	816 22
Siskiyou	566 38	397 80	666 38	517 03	24 49	2,172 08
Solano	1,304 64	970 25	1,877 98	1,158 29	161 64	5,472 80
Sonoma	1,618 72	1,364 19	2,869 00	911 83	159 21	6,922 95
Stanislaus	1,141 32	824 61	1,444 50	1,183 22	99 95	4,630 60
Sutter	900 20	627 84	920 30	902 85	17 25	3,368 44
Tehama	953 43	675 15	1,114 89	856 04	59 65	3,559 16
Trinity	137 62	110 07	190 01	149 81	5 98	593 49
Tulare	1,408 46	1,069 48	2,293 03	1,680 19	127 58	6,578 74
Tuolumne	314 18	238 16	275 64	301 24	12 96	1,142 18
Ventura	827 07	569 20	890 61	719 10	59 12	3,088 11
Yolo	1,304 65	994 60	1,837 99	1,428 85	82 13	5,648 22
Yuba	713 56	478 93	641 14	566 42	12 69	2,412 74
Totals	\$78,167 03	\$47,322 25	\$90,249 17	\$60,311 15	\$6,227 32	\$282,296 93

STATEMENT No. 20.

Commissions and Mileage for Assessing, Auditing, Collecting, and Paying in State Taxes for the Thirty-ninth Fiscal Year, commencing July 1, 1889, and ending June 30, 1890.

COUNTIES.	Assessor's Com- missions	Auditor's Com- missions	Treasurer's Com- missions and Mileage	Tax Collector's Commissions	Assessor's Com- missions as Collector on Personal Prop- erty	Total.
Alameda	\$4,236 92	\$3,967 77	\$4,556 50	\$7,441 32	\$497 29	\$20,699 80
Alpine	38 22	27 41	118 67	55 76	7 78	247 84
Amador	744 67	456 16	725 87	677 74	14 18	2,618 62
Butte	1,711 78	1,331 18	3,097 76	2,290 65	216 74	8,648 11
Calaveras	720 99	443 90	689 86	602 81	61 66	2,519 22
Colusa	1,930 04	1,551 05	3,754 26		155 17	7,300 52
Contra Costa	1,435 17	1,045 73	2,300 75	1,697 48	448 29	6,927 42
Del Norte	385 11	252 06	388 84	403 99		1,430 00
El Dorado	628 54	397 36	577 34	937 49	5 95	2,546 68
Fresno	2,394 28	2,043 88	5,218 12	3,689 29	134 71	13,480 28
Humboldt	1,627 54	1,245 21	2,982 70	2,006 07	69 46	7,930 98
Inyo	240 60	120 30	280 45	268 59	16 15	926 09
Kern	1,215 04	808 83	1,733 26	1,235 53	148 71	5,141 37
Lake	704 39	426 31	769 27	647 49	13 56	2,561 02
Lassen	460 82	302 21	507 02	486 59	17 71	1,774 35
Los Angeles	4,746 54	4,603 74	12,339 66	8,529 23	846 24	31,065 41
Marin	1,227 01	825 57	1,619 45	1,344 67	122 46	5,239 16
Mariposa	349 46	234 06	386 90	339 84	12 20	1,322 46
Mendocino	1,260 30	860 08	1,762 37	1,338 16	60 76	5,281 67
Merced	1,387 94	992 77	2,155 03	1,561 05	117 84	6,214 63
Modoc	529 58	349 63	528 50	536 29	20 84	1,964 84
Mono	170 75	119 79	228 06	222 74	7 33	748 67
Monterey	1,415 42	1,020 27	3,016 94	1,723 84	104 19	7,280 66
Napa	1,403 86	1,009 93	2,170 14	1,685 76	30 35	6,300 04
Nevada	993 15	556 81	964 71		66 20	2,580 87
Orange	1,046 52	690 65	1,293 06	1,085 11		4,115 34
Placer	1,064 72	703 08	1,254 04	1,024 42	45 66	4,096 92
Plumas	429 21	280 10	433 03	381 12	16 10	1,544 56
Sacramento	2,423 89	2,060 10	5,171 69	1,011 25	362 07	11,029 00
San Benito	913 94	579 12	993 86	862 83	57 91	3,407 66
San Bernardino	1,694 15	1,312 59	3,182 50	2,236 95	310 80	8,736 99
San Diego	2,101 05	1,733 75	4,402 85	1,491 53	408 92	10,138 10
San Francisco	34,974 87	13,495 63	16,179 61	16,391 68		81,041 79
San Joaquin	2,571 37	2,229 12	5,690 93	4,094 76	162 19	14,748 37
San Luis Obispo	1,399 27	1,005 42	2,197 81	1,678 29	57 99	6,338 78
San Mateo	1,391 80	997 58	2,159 41	1,719 48	51 49	6,319 76
Santa Barbara	1,479 05	1,088 06	2,536 83	1,889 25	103 33	7,096 52
Santa Clara	3,400 91	3,076 09	8,256 35		316 17	15,049 52
Santa Cruz	1,238 51	838 22	1,779 60	1,317 13	73 28	5,246 74
Shasta	840 04	512 40	951 66	720 58	35 70	3,060 38
Sierra	313 71	214 58	330 48	278 37	12 15	1,149 29
Siskiyou	847 32	531 99	1,050 26	862 88	59 63	3,352 08
Solano	1,664 99	1,282 05	2,959 19	1,925 75	139 75	7,971 73
Sonoma	2,238 86	1,869 78	4,729 40	1,526 74	190 84	10,555 62
Stanislaus	1,489 82	1,099 69	2,430 77	1,896 57	116 86	7,033 71
Sutter	1,203 97	801 29	1,550 42	1,346 79	36 74	4,939 21
Tehama	1,255 39	854 98	1,774 06	1,353 88	84 82	5,323 13
Trinity	232 75	156 45	253 85	243 10	8 58	894 73
Tulare	1,839 21	1,463 00	3,583 43	2,533 25	138 83	9,557 72
Tuolumne	490 95	322 06	427 60	470 32	22 81	1,733 74
Ventura	1,056 93	700 85	1,320 31	1,033 90	74 46	4,186 45
Yolo	1,701 54	1,312 25	3,028 69	2,302 44	55 01	8,399 93
Yuba	961 42	623 93	1,060 57	888 32	20 50	3,554 74
Totals	\$104,224 28	\$66,826 82	\$133,864 69	\$92,289 07	\$6,158 36	\$403,463 22

STATEMENT No. 21.

The Valuation of Real and Personal Property, and the Rate of Taxation on each One Hundred Dollars, from the Organization of the State Government to the Year 1889, inclusive.

YEAR.	Total Assessed Value of Property in California.	Value of Personal Property.	Per Cent of Personal Property of Real Estate.	State Rate of Taxation.
1850	\$57,670,689 00	\$13,968,797 00	24.22	.50
1851	49,231,052 00	20,955,116 00	42.52	.65
1852	64,579,375 00	24,213,395 00	37.49	.65
1853	95,355,646 00	33,674,000 00	35.32	.60
1854	111,191,630 00	39,040,428 00	35.11	.60
1855	103,887,193 00	34,858,319 00	33.56	.60
1856	115,007,440 00	40,942,699 00	35.60	.70
1857	126,059,461 00	59,149,630 00	46.92	.70
1858	125,955,877 00	54,185,728 00	43.01	.60
1859	131,060,279 00	56,580,344 00	43.17	.60
1860	148,193,540 00	68,369,383 00	46.06	.60
1861	147,811,617 00	73,350,591 00	49.62	.60
1862	160,369,071 00	74,014,666 00	46.15	.77
1863	174,104,955 00	80,496,645 00	46.23	.92
1864	179,164,730 00	78,117,375 00	43.60	1.25
1865	183,534,312 00	79,782,436 00	43.47	1.15
1866	200,368,826 00	92,490,635 00	46.15	1.13
1867	212,205,339 00	100,105,600 00	47.17	1.13
1868	237,483,175 00	105,112,083 00	44.26	1.00
1869	260,563,879 00	104,723,592 00	40.19	.97
1870	277,538,134 00	108,001,588 00	38.90	.865
1871	267,808,126 00	86,174,230 00	32.17	.865
1872	637,232,823 00	219,942,323 00	30.40	.50
1873	528,747,043 00	118,425,520 00	22.20	.50
1874	611,495,197 00	210,779,127 00	34.46	.649
1875	618,083,315 00	199,243,292 00	32.07	.605
1876	596,073,177 00	140,431,866 00	25.27	.735
1877	586,953,022 00	128,780,824 00	21.77	.63
1878	584,578,036 00	118,304,451 00	20.23	.55
1879	549,220,968 00	112,325,850 00	20.45	.625
1880	666,399,985 00	174,514,906 00	26.18	.64
1881	659,835,762 00	160,058,309 00	24.24	.655
1882	608,642,036 00	134,048,419 00	22.02	.596
1883	765,729,430 00	167,338,644 00	21.85	.497
1884	821,078,767 00	166,394,997 00	20.26	.452
1885	859,512,384 00	172,760,681 00	27.90	.544
1886	816,446,700 00	151,937,132 00	18.60	.56
1887	956,740,805 00	165,663,387 00	17.31	.608
1888	1,107,952,700 00	173,273,458 00	15.63	.504
1889	1,111,550,979 00	170,661,836 00	15.35	.722

STATEMENT No. 22.

Transactions in Pure Wine Labels for Half Year ending December 31, 1888.

NAME OF PURCHASER.	On Hand and Purchased During Term.		Used During Term.		Balance on Hand at End of Term.	
	Bottles.	Packages.	Bottles.	Packages.	Bottles.	Packages.
Kohler & Frohling	29,380	1,998			29,380	1,998
Buckner Bros. & Requa	800	188			800	188
August Erz	185	260			185	260
G. H. Kerr	400	450	50	12	350	438
D. D. Davisson	30	82	30	82		
G. F. Hooper	118	407	87	112	31	295
L. J. Rose & Co. (limited)	25,600	5,550	25,500	2,000	100	3,550
Upham & Co.	2,500	310	1,500	30	1,000	280
Laneel & Co.		1,000		1,000		
Kohler & Van Bergen	15,000	1,450			15,000	1,450
Bulotti & Perini		1,906				1,906
G. M. Skinner	200	500	100	250	100	250
W. Palmtag	336				336	
H. Kroeger		10				10
Michaelsen Bros.	499	454		8	499	446
J. M. Roney	615	9	259		356	9
P. Holst	448	476			448	476
H. Farr	471	424			471	424
Friedlander, Behneman & Co	210	260			210	260
Philip Tournier & Co.	622	250	187	1	435	249
Egger's Vineyard	408	338	63	57	345	281
C. H. Alford	100	900			100	900
Lefranc & Masson	1,000	200			1,000	200
C. Meyer		778				778
Sierra Madre Vintage Co.	4,065	900	1,375	326	2,690	574
D. P. Meyers	700	300			700	300
Cordelia Wine Co.	3,800	1,669	3,451	644	349	1,025
Lilienthal & Co.	10,800	400	3,000	100	7,800	300
Frapolli, Berges & Co.		3,715		963		2,752
J. Gundlach & Co.	12,500	530	500		12,000	530
R. Borner & Co.		200		150		50
D. Cozzens	100	250			100	250
P. G. Sabatie & Co.	3,726	481			3,726	481
A. Haraszthy & Co.	29,686	1,762			29,686	1,762
Goldberg, Bowen & Co.	11,525	100	11,025	52	500	48
T. Reiser		292		81		211
Mrs. J. A. Poppe		589				589
Geo. Maurer	2,118	661	674	140	1,444	521
W. C. McCutchan	82	65	20	8	62	53
G. Meredith	250	237		3	250	234
Lachman & Jacobi	10,000	4,958			10,000	4,958
G. Groezinger	900	100			900	100
J. W. Gray & Co.	1,000		600		400	
Totals	170,174	35,409	48,421	6,019	121,753	29,386

STATEMENT No. 22—Continued.

For Half Year ending June 30, 1889.

NAME OF PURCHASER.	On Hand and Purchased During Term.		Used During Term.		Balance on Hand at End of Term.	
	Bottles.	Packages.	Bottles.	Packages.	Bottles.	Packages.
A. Haraszthy & Co.	29,686	1,762	-----	-----	29,686	1,762
Mrs. C. Krug	-----	833	-----	-----	-----	833
Bulotti & Ferini	-----	1,906	-----	-----	-----	1,906
Buckner Bros. & Requa	800	188	-----	-----	800	188
P. & J. J. Gobbi	994	979	-----	-----	994	979
T. & M. E. Tobin & Co.	1,000	500	-----	-----	1,000	500
Lefranc & Masson	1,000	200	-----	-----	1,000	200
Goldberg, Bowen & Co.	30,500	48	18,500	-----	12,000	48
Geo. Maurer	1,444	521	583	92	861	429
H. Kroeger	-----	10	-----	10	-----	-----
Kohler & Van Bergen	15,000	1,450	-----	-----	15,000	1,450
Frapolli, Berges & Co.	-----	2,752	-----	368	-----	2,384
L. J. Rose & Co. (limited) ..	20,100	3,550	1,500	-----	18,600	3,550
Geo. F. Hooper	31	295	31	12	-----	283
Kohler & Frohling	29,380	1,998	-----	-----	29,380	1,998
Cordelia Wine Co.	4,349	1,025	460	193	3,889	832
Cucamonga Vineyard Co.	1,500	750	500	150	1,000	600
Sierra Madre Vintage Co.	2,690	574	435	380	2,255	194
R. Borner	-----	50	-----	-----	-----	50
Lachman & Jacobi	10,000	4,958	-----	-----	10,000	4,958
D. Cozzens	100	250	-----	-----	100	250
Michaelsen Bros.	499	446	-----	5	499	441
G. Groezinger	900	100	-----	-----	900	100
Lilienthal & Co.	17,800	300	5,300	100	1,700	200
W. Palmtag	-----	336	-----	-----	-----	336
W. C. McCutchan	62	53	7	2	55	51
J. Gundlach & Co.	12,000	530	1,000	-----	11,000	530
Martin, Fusier & Co.	500	1,825	-----	-----	500	1,825
W. B. Tubbs	835	745	-----	-----	835	745
C. Meyer	-----	778	-----	-----	-----	778
Santa Clara College	199	680	-----	134	199	546
P. G. Sabatie & Co.	3,726	481	-----	-----	3,726	481
Henry Farr	471	424	-----	73	471	351
Geo. W. Skinner	100	250	100	250	-----	-----
Upham & Co.	1,000	280	1,000	280	-----	-----
J. M. Roney	356	9	356	9	-----	-----
Philip Tournier & Co.	435	249	125	-----	310	249
Totals	187,457	32,085	29,897	2,058	146,760	30,027

STATEMENT No. 22—Continued.

For Half Year ending December 31, 1889.

NAME OF PURCHASER.	On Hand and Purchased During Term.		Used During Term.		Balance on Hand at End of Term.	
	Bottles.	Packages.	Bottles.	Packages.	Bottles.	Packages.
George F. Hooper		283		62		221
Michaelsen Bros.	499	441		13	499	428
Henry Farr	471	351		96	471	255
Napa Valley Wine Co.	90,434		64,334		26,100	
Lefranc & Masson	1,000	200	1,000	200		
D. P. Meyers	700	300	700	300		
P. G. Sabatie & Co.	3,726	481			3,726	481
Kohler & Van Bergen	15,000	450			15,000	450
Cordelia Wine Company	3,889	832	2,639	80	1,250	752
Goldberg, Bowen & Co.	32,000	48	24,000		8,000	48
A. Haraszthy & Co.	29,686	1,762			29,686	1,762
R. Borner		50		50		
George Maurer	861	429	861	211		218
D. Cozzens	100	250			100	250
Lachman & Jacobi	10,000	4,958			10,000	4,958
J. Gundlach & Co.	11,000	530			11,000	530
Lilienthal & Co.	11,700	200	7,100		4,600	200
W. C. McCutchan	55	51			55	51
G. Groezinger	900	100			900	100
Cucamonga Vineyard Co.	1,000	600		100	1,000	500
Sierra Madre Vintage Co.	2,255	94	590	54	1,665	140
George H. Kerr	330	420	30	20	320	400
Totals	215,606	12,830	101,254	1,186	114,372	11,744

STATEMENT No. 22—Continued.

For Half Year ending June 30, 1890.

NAME OF PURCHASER.	On Hand and Purchased During Term.		Used During Term.		Balance on Hand at End of Term.	
	Bottles.	Packages.	Bottles.	Packages.	Bottles.	Packages.
Lilienthal & Co.	14,600	2,200	1,600	150	13,000	2,050
Lachman & Jacobi	10,000	4,958			10,000	4,958
Goldberg, Bowen & Co.	18,000	48	17,500		500	48
W. C. McCutchan	55	51			55	51
A. Haraszthy & Co.	29,686	1,762			29,686	1,762
P. G. Sabatie & Co.	3,726	481			3,726	481
Philip Tournier & Co.	150	200			150	200
Henry Farr	471	255			471	255
G. Groezinger	900	100			900	100
J. Gundlach & Co.	11,000	530			11,000	530
Cordelia Wine Company	3,250	752	3,250			752
Cucamonga Vineyard Co.	1,000	500		100	1,000	400
D. Cozzens	100	250			100	250
G. F. Hooper		221		14		207
Buckner Bros. & Requa	800	188	800	188		
Michaelsen Bros.	499	428		5	499	423
Sierra Madre Vintage Co.	1,665	140	270	6	1,395	34
Kohler & Frohling	29,380	1,998	175	68	29,205	1,930
Totals	125,282	15,062	23,595	531	101,687	14,431

STATEMENT No. 23.

Estimate of Expenditures for the Forty-third and Forty-fourth Fiscal Years, ending June 30, 1892 and 1893.

FOR WHAT PURPOSE.	Amount.	Total.
<i>Legislative Department.</i>		
Per diem and mileage of Lieutenant-Governor and Senators.....	\$20,500 00	\$103,700 00
Per diem and mileage of Assemblymen.....	41,000 00	
Pay of officers and Clerks of the Senate.....	6,000 00	
Pay of officers and Clerks of the Assembly.....	6,200 00	
Contingent expenses of the Senate.....	12,000 00	
Contingent expenses of the Assembly.....	18,000 00	
<i>Judicial Department.</i>		
Salaries of Justices of the Supreme Court.....	\$84,000 00	526,360 00
State's portion of salaries of Judges of Superior Courts.....	285,000 00	
Salary of Clerk of the Supreme Court.....	6,000 00	
Salaries of Deputy Clerks of the Supreme Court.....	18,000 00	
Salary of Reporter of the Decisions of the Supreme Court.....	5,000 00	
Salary of Deputy Reporter of the Decisions of the Supreme Court.....	4,800 00	
Salaries of Secretaries of the Supreme Court.....	9,600 00	
Salary of Bailiff and performing the work of Porters of Supreme Court.....	3,000 00	
Pay of Porter for office of Clerk of Supreme Court.....	960 00	
Postage and contingent expenses of Supreme Court.....	500 00	
Postage and contingent expenses of Clerk of the Supreme Court.....	700 00	
Expenses of Supreme Court, under Section 47, Code of Civil Procedure.....	38,000 00	
Salary of Stenographer.....	6,000 00	
Salaries of Supreme Court Commissioners.....	60,000 00	
Salary of Secretary for Supreme Court Commissioners.....	4,800 00	
<i>For Governor's Office.</i>		
Salary of Governor.....	\$12,000 00	31,800 00
Salary of Private Secretary to the Governor.....	8,000 00	
Salary of Executive Secretary to Governor.....	4,000 00	
Pay of Porter to Governor.....	1,800 00	
Special contingent expenses (secret service).....	5,000 00	
Postage, expressage, and telegraphing.....	1,000 00	
<i>State Board of Examiners.</i>		
Salary of Secretary of State Board of Examiners.....	\$3,600 00	3,800 00
Postage and expressage, State Board of Examiners.....	200 00	
<i>For Secretary of State's Office.</i>		
Salary of Secretary of State.....	\$6,000 00	27,360 00
Salary of Deputy Secretary of State.....	4,800 00	
Salary of Bookkeeper.....	4,000 00	
Salaries of Clerks.....	9,600 00	
Pay of Porter.....	960 00	
Postage, expressage, and telegraphing.....	1,500 00	
Contingent and traveling expenses.....	500 00	
<i>For Controller's Office.</i>		
Salary of Controller.....	\$6,000 00	33,510 00
Salary of Deputy.....	4,800 00	
Salary of Bookkeeper.....	4,000 00	
Salaries of Clerks.....	16,000 00	
Pay of Porter.....	960 00	
Postage, expressage, and telegraphing.....	1,000 00	
Traveling and contingent expenses.....	750 00	
<i>For Treasurer's Office.</i>		
Salary of Treasurer.....	\$6,000 00	21,010 00
Salary of Deputy.....	4,800 00	
Salary of Bookkeeper.....	4,000 00	
Salaries of Watchmen.....	4,800 00	
Pay of Porter.....	960 00	
Postage, expressage, and contingent expenses.....	450 00	
Amount carried forward.....		\$747,540 00

STATEMENT No. 23—Continued.

FOR WHAT PURPOSE.	Amount	Total.
Amount brought forward.....		\$747,540 00
<i>For Attorney-General's Office.</i>		
Salary of Attorney-General.....	\$6,000 00	
Salary of Deputy.....	4,800 00	
Salary of Clerk.....	3,200 00	
Pay of Porter.....	960 00	
Postage, expressage, and contingent expenses.....	500 00	
Traveling expenses.....	1,000 00	
Costs and expenses of suits wherein the State is a party in interest.....	5,000 00	
<i>For Surveyor-General's Office.</i>		21,460 00
Salary of Surveyor-General.....	\$6,000 00	
Salary of Deputy.....	4,800 00	
Salaries of Clerks.....	12,800 00	
Pay of Porter.....	960 00	
Postage and expressage.....	700 00	
Contingent expenses.....	200 00	
Purchase of and copying maps.....	800 00	
Traveling expenses of Surveyor-General and Attorney General, when engaged in contests between the State and the United States, in relation to public lands.....		26,260 00
<i>For Office of Superintendent of Public Instruction.</i>		1,000 00
Salary of Superintendent of Public Instruction.....	\$6,000 00	
Salary of Deputy.....	4,800 00	
Salary of Clerk.....	3,200 00	
Salary of clerical assistance in distributing State school books.....	3,200 00	
Pay of Porter.....	960 00	
Postage and expressage.....	1,800 00	
Contingent expenses.....	200 00	
Traveling expenses.....	3,000 00	
<i>For State Library.</i>		23,160 00
Salary of State Librarian.....	\$6,000 00	
Salaries of two Deputies.....	7,200 00	
Pay of Porter.....	1,800 00	
Postage and expressage.....	400 00	
<i>For Military Purposes.</i>		15,400 00
Salary of Adjutant-General.....	\$6,000 00	
Salary of Assistant Adjutant-General.....	4,800 00	
Pay of Porter.....	960 00	
Postage, expressage, and telegraphing.....	500 00	
Care of State Armory, cleaning and transportation of arms, and traveling and contingent expenses.....	1,500 00	
For armory rents and other expenses of the National Guard.....	175,000 00	
Expenses of encampment of the National Guard.....		188,760 00
<i>For State Printing Office.</i>		52,000 00
Salary of Superintendent of State Printing.....	\$6,000 00	
Support of State Printing Office, including pay of employés.....	200,000 00	
<i>For School Text-Book Department.</i>		206,000 00
Pay of employés and for stock and material.....		50,000 00
<i>For State Board of Health.</i>		
Salary of Secretary of State Board of Health.....	\$5,000 00	
Traveling and contingent expenses.....	3,000 00	
<i>For Office of Insurance Commissioner.</i>		8,000 00
Salary of Insurance Commissioner.....	\$6,000 00	
Salary of Deputy.....	3,600 00	
Amount carried forward.....		9,600 00
		\$1,349,180 00

STATEMENT No. 23—Continued.

FOR WHAT PURPOSE.	Amount.	Total.
Amount brought forward.....		\$1,349,180 00
<i>For Board of Railroad Commissioners.</i>		
Salaries of Railroad Commissioners	\$24,000 00	
Salary of Secretary	4,800 00	
Salary of Bailiff.....	2,400 00	
Office rent	1,800 00	
Fuel, lights, postage, expressage, and incidental expenses.....	1,000 00	
Traveling expenses of Railroad Commissioners, and other persons in their employ, when traveling in the performance of official duties.....	500 00	
		34,500 00
<i>For State Board of Equalization.</i>		
Salaries of members of the State Board of Equalization.....	\$24,000 00	
Salary of Clerk.....	4,800 00	
Pay of Porter	960 00	
Traveling expenses and contingent clerical assistance.....	10,000 00	
Postage, expressage, telegraphing, and contingent expenses.....	1,000 00	
		40,760 00
Pay of employes of State Capitol building and grounds.....		54,360 00
Salary of Guardian of Yosemite Valley.....		3,000 00
Traveling expenses of Yosemite Valley Commissioners.....		3,000 00
Salary of Special Policemen, Capitol grounds.....		7,200 00
Traveling expenses of State Board of Education.....		700 00
Education and care of deaf, dumb, and blind.....		85,000 00
Adult Blind Home.....		40,000 00
<i>For Insane Asylums.</i>		
Support of Insane Asylum at Stockton.....	\$390,000 00	
Support of Insane Asylum at Napa	370,000 00	
Home for Feeble-Minded Children	75,000 00	
Support of Insane Asylum at Agnews.....	170,000 00	
Reform School at Whittier	60,000 00	
Transportation of Insane.....	50,000 00	
		1,115,000 00
<i>For State Prisons.</i>		
Support of State Prison at San Quentin.....	\$116,000 00	
Support of State Prison at Folsom.....	225,000 00	
Transportation of prisoners.....	50,000 00	
		391,000 00
<i>For State Normal Schools.</i>		
Support of State Normal School at San José.....	\$70,000 00	
Support of State Normal School at Los Angeles	40,000 00	
Support of State Normal School at Chico.....	27,000 00	
Use of library at San José Normal School.....	1,000 00	
Use of library at Los Angeles Normal School.....	1,000 00	
Use of library at Chico Normal School.....	1,000 00	
		140,000 00
<i>For Office of the Bureau of Labor Statistics.</i>		
Salary of Commissioner.....	\$4,800 00	
Salary of Deputy.....	3,600 00	
Stationery and contingent expenses	1,000 00	
Office rent	1,200 00	
Salary of assistants, traveling, and contingent expenses for office of Bureau	5,000 00	
		15,600 00
<i>Office of the State Board of Horticulture.</i>		
For uses of the State Board of Horticulture.....	20,000 00	
Salary of Secretary to State Board of Horticulture.....	4,200 00	
Salary of Clerk to Secretary to State Board of Horticulture.....	1,200 00	
Salary of Clerk to Publishing and Quarantine Bureau of State Board of Horticulture.....	4,200 00	
		29,600 00
<i>Office of the State Board of Viticulture.</i>		
For uses of the State Board of Viticulture		20,000 00
Amount carried forward.....		\$3,328,900 00

STATEMENT No. 23—Continued.

FOR WHAT PURPOSE.	Amount.	Total.
Amount brought forward		\$3,328,900 00
<i>Miscellaneous.</i>		
Payments of rewards offered by the Governor.....	\$5,000 00	
Rewards for the arrest and conviction of highway robbers.....	5,000 00	
Arresting criminals without the limits of the State.....	6,000 00	
Water for irrigation, purchase of hose, and contingent expenses on the State Capitol grounds.....	5,000 00	
Forestry Commission.....	5,000 00	
Mining Bureau.....	10,000 00	
Water to be used in the Capitol building.....	1,200 00	
Repairs to Capitol building and furniture, and purchase of carpets.....	5,000 00	
Stationery, fuel, and lights for Legislature and State officers.....	15,000 00	
Purchase of ballot paper.....	5,000 00	
Official advertising.....	2,000 00	
Payment of interest on \$100,000 to Hastings College of Law.....	14,000 00	
Annual reimbursement of the University of California.....	9,570 00	
Restoration and preservation of fish in the waters of the State.....	10,000 00	
Rent of rooms for Hastings College of Law.....	2,400 00	
		100,170 00
Care of State Burial Grounds.....	\$200 00	
Pay of Presidential Electors.....	550 00	
		750 00
Aid to State Agricultural Society.....	\$25,000 00	
Aid to District Agricultural Society No. 1.....	4,000 00	
Aid to District Agricultural Society No. 2.....	3,000 00	
Aid to District Agricultural Society No. 3.....	3,000 00	
Aid to District Agricultural Society No. 4.....	3,000 00	
Aid to District Agricultural Society No. 5.....	2,400 00	
Aid to District Agricultural Society No. 6.....	3,000 00	
Aid to District Agricultural Society No. 7.....	2,400 00	
Aid to District Agricultural Society No. 8.....	2,000 00	
Aid to District Agricultural Society No. 9.....	2,000 00	
Aid to District Agricultural Society No. 10.....	2,000 00	
Aid to District Agricultural Society No. 11.....	2,400 00	
Aid to District Agricultural Society No. 12.....	2,400 00	
Aid to District Agricultural Society No. 13.....	3,000 00	
Aid to District Agricultural Society No. 14.....	1,500 00	
Aid to District Agricultural Society No. 15.....	2,000 00	
Aid to District Agricultural Society No. 16.....	1,500 00	
Aid to District Agricultural Society No. 17.....	3,000 00	
Aid to District Agricultural Society No. 18.....	2,000 00	
Aid to District Agricultural Society No. 19.....	2,000 00	
Aid to District Agricultural Society No. 20.....	2,400 00	
Aid to District Agricultural Society No. 21.....	2,500 00	
Aid to District Agricultural Society No. 22.....	2,000 00	
Aid to District Agricultural Society No. 23.....	1,750 00	
Aid to District Agricultural Society No. 24.....	1,500 00	
Aid to District Agricultural Society No. 25.....	2,500 00	
Aid to District Agricultural Society No. 26.....	2,000 00	
Aid to District Agricultural Society No. 27.....	2,400 00	
Aid to District Agricultural Society No. 28.....	2,400 00	
Aid to District Agricultural Society No. 29.....	2,000 00	
		93,050 00
For orphans, half orphans, abandoned children, and foundlings.....	\$450,000 00	
Aged persons in indigent circumstances.....	300,000 00	
Inmates of Veterans' Home.....	60,000 00	
		810,000 00
Total General Fund estimates.....		\$4,332,870 00
Total School Fund estimates.....		3,600,000 00
Total Interest and Sinking Fund estimates.....		303,420 00
Total estimates of the cost of the State Government for the forty-first and forty-second fiscal years.....		\$8,236,290 00

EXHIBITS

SHOWING THE

ASSESSED VALUE OF PROPERTY

AS RETURNED BY COUNTY AUDITORS FOR THE YEAR 1890,

AND THE

INDEBTEDNESS OF THE COUNTIES OF THE STATE.

1889-90.

FINANCIAL CONDITION

Of the several Counties of the State for the Year 1883.

COUNTIES.	Funded Debt.	Floating Debt.	Rate of Interest.	Cash in hands of Treasurers applicable to Payment of such Debt.	Value of Property Owned by Counties.	Total Assessed Value of Property.	Rate of Taxation on each \$100 Valuation.		
							State.	County.	Total.
Alameda	\$155,000 00	\$4,507 21	6, 8	\$63,875 30	\$740,000 00	\$66,927,660 00	\$0 50.4	{ \$0 44.6	\$0 95
Alpine	-----	26,415 43	-----	165 66	1,300 00	288,435 00	50.4	{ 74.6	1 25
Amador	-----	7,374 45	-----	-----	57,000 00	4,422,487 00	50.4	{ 2 39.2	3 00
Butte	72,310 50	5,404 43	5, 10	25,333 01	60,000 00	20,297,937 00	50.4	{ 99.6	1 50
Calaveras	36,500 00	26,740 00	8	2,897 98	20,000 00	4,224,060 00	50.4	{ 57.4	1 08
Colusa	-----	-----	-----	-----	100,000 00	23,777,126 00	50.4	{ 84.6	1 35
Contra Costa	22,000 00	924 96	6	33,685 18	34,000 00	15,934,050 00	50.4	{ 1 19.6	1 70
Del Norte	-----	-----	-----	-----	12,000 00	1,871,560 00	50.4	{ 39.6	90
El Dorado	190,000 00	6 00	5	2,457 63	30,000 00	3,708,044 00	50.4	{ 68.6	1 20
Fresno	-----	-----	-----	-----	789,000 00	34,876,908 00	50.4	{ 37.6	88
Humboldt	113,500 00	1,181 65	9	13,754 01	190,000 00	17,758,736 00	50.4	{ 64.6	1 15
Inyo	72,000 00	2,800 65	7	-----	15,000 00	1,520,677 00	50.4	{ 1 06.6	1 57
Kern	30,000 00	-----	7, 8	-----	48,000 00	11,112,003 00	50.4	{ 1 54.6	2 05
Lake	47,800 00	-----	5	11,404 36	13,000 00	3,682,831 00	50.4	{ 48	98.4
Lassen	-----	3,605 29	-----	178 99	15,000 00	2,554,155 00	50.4	{ 62.6	1 13
Los Angeles	697,000 00	1,663 00	4, 6, 7	1,663 00	562,000 00	102,259,506 00	50.4	{ 74.6	1 25
Marin	318,000 00	1,428 93	5, 6, 7	20,922 64	115,000 00	10,961,946 00	50.4	{ 99.6	1 50
Mariposa	-----	7,459 40	-----	222 39	47,000 00	1,879,980 00	50.4	{ 1 99.6	2 50
Mendocino	-----	-----	-----	-----	59,000 00	11,289,904 00	50.4	{ 1 04.6	1 55
Merced	123,900 00	15,348 87	4, 5	4,856 15	81,500 00	14,917,870 00	50.4	{ 1 13.6	1 64
Modoc	-----	-----	-----	-----	8,500 00	3,074,274 00	50.4	{ 1 39.6	1 90
Mono	25,500 00	-----	5	89 59	46,850 00	987,444 00	50.4	{ 49.6	1 00
Monterey	233,000 00	-----	5, 7	-----	83,000 00	15,443,235 00	50.4	{ 69.6	1 20
							50.4	{ 54.8	1 05.2
							50.4	{ 74.6	1 25
							50.4	{ 2 05.6	2 56
							50.4	{ 79.6	1 30
							50.4	{ 1 19.6	1 70
							50.4	{ 50.4	99.6
							50.4	{ 99.6	1 50
							50.4	{ 1 74.6	2 25
							50.4	{ 99.6	1 50

Napa.....	188,000 00	Napa.....	4½, 5, 6	-----	-----	130,000 00	13,526,214 00	50.4	69.6	1 20
Nevada.....	9,400 00	Nevada.....	7	114 77	-----	105,000 00	6,367,333 00	50.4	94.6	1 45
Placer.....		Placer.....			-----	26,000 00	7,816,620 00	50.4	1 19.6	1 70
Plumas.....	62,100 00	Plumas.....	6	-----	-----	25,000 00	2,340,578 00	50.4	1 59.6	2 10
Sacramento.....	576,500 00	Sacramento.....	4½, 6, 8	-----	-----	275,000 00	33,897,435 00	50.4	1 80.6	1 31
San Benito.....	40,000 00	San Benito.....	4,044 00	-----	-----	50,000 00	6,265,503 00	50.4	1 14.6	1 65
San Bernardino.....	15,987 15	San Bernardino.....	5	-----	-----	105,000 00	26,500,680 00	50.4	1 99.6	2 50
San Diego.....	207,000 00	San Diego.....	99,413 00	-----	-----	110,000 00	41,522,608 00	50.4	49.6	1 00
San Francisco.....	1,875,500 00	San Francisco.....	4½, 5	2,069 00	-----	923,000 00	275,539,826 00	50.4	74.6	1 25
San Joaquin.....	240,000 00	San Joaquin.....	6, 7	825,613 69	-----	350,140 00	38,692,149 00	50.4	67.6	1 18
San Luis Obispo.....	153,500 00	San Luis Obispo.....	4	321,864 45	-----	85,000 00	14,662,763 00	50.4	89.6	1 50
San Mateo.....	78,000 00	San Mateo.....	5, 6, 8	-----	-----	52,000 00	13,702,825 00	50.4	1 14.78	1 75.58
Santa Barbara.....	24,000 00	Santa Barbara.....	6, 10	-----	-----	111,500 00	20,003,387 00	50.4	39.6	90
Santa Clara.....	320,000 00	Santa Clara.....	5, 7	2,239 69	-----	423,550 00	52,659,849 00	50.4	59.6	1 10
Santa Cruz.....	169,000 00	Santa Cruz.....	4½, 5, 6, 7	-----	-----	50,000 00	10,704,389 00	50.4	29.6	80
Shasta.....	62,000 00	Shasta.....	4½	4,204 39	-----	17,500 00	6,530,345 00	50.4	64.6	1 05
Sierra.....	21,700 00	Sierra.....	7	-----	-----	12,000 00	1,751,969 00	50.4	72.6	1 23
Siskiyou.....	64,700 00	Siskiyou.....	7	64 35	-----	21,000 00	6,776,354 00	50.4	97.6	1 48
Solano.....	80,785 57	Solano.....	6	-----	-----	64,550 00	20,409,394 00	50.4	1 49.6	2 00
Sonoma.....	278,000 00	Sonoma.....	5, 6, 7	-----	-----	225,000 00	30,126,588 00	50.4	99.6	2 70
Stanislaus.....	31,500 00	Stanislaus.....	4½	-----	-----	77,850 00	14,913,628 00	50.4	84.6	1 35
Sutter.....	11,000 00	Sutter.....	6, 8, 9	11,876 10	-----	43,000 00	10,033,866 00	50.4	42.6	93
Tehama.....	120,520 00	Tehama.....	6	-----	-----	75,000 00	11,908,345 00	50.4	48.6	99
Trinity.....		Trinity.....	5	1,332 31	-----	11,000 00	1,149,664 00	50.4	50.6	1 10
Tulare.....	91,000 00	Tulare.....	4½, 7	849 55	-----	108,000 00	24,286,943 00	50.4	88.6	1 39
Tuolumne.....		Tuolumne.....		-----	-----	29,000 00	2,572,889 00	50.4	96.6	1 50
Ventura.....	13,000 00	Ventura.....	5	348 19	-----	70,000 00	8,855,251 00	50.4	2 49.6	3 00
					-----				44.6	95
					-----				59.6	1 10
					-----				1 14.6	1 65
					-----				1 44.6	1 95
					-----				1 89.6	1 40

FINANCIAL CONDITION—Continued.

COUNTIES.	Funded Debt.	Floating Debt.	Rate of Interest.	Cash in hands of Treasurers Ap- plicable to Payment of such Debt.	Value of Property Owned by Counties.	Total Assessed Value of Prop- erty.	Rate of Taxation on each \$100 Valuation.		
							State.	County.	Total.
Yolo.....	\$78,500 00	-----	5	-----	\$41,000 00	\$20,462,264 00	\$0 50.4	{ \$0 50.6 74.6	\$1 01 1 25
Yuba.....	121,000 00	-----	6, 8	-----	58,000 00	7,017,753 00	50.4	{ 1 04.6 1 24.6	1 55 1 75
Totals	\$7,074,203 22	\$219,130 52	-----	\$1,353,082 37	\$22,803,240 00	\$1,107,952,700 00	-----	-----	-----

NOTE.—The financial statements of the following named counties were not transmitted to this office, viz : Del Norte, Mendocino, Fresno, Modoc, Placer, San Mateo, Trinity, and Tuolumne. See detailed statement of indebtedness of counties for 1890, at end of this report.

FINANCIAL CONDITION

Of the several Counties of the State for the Year 1889.

COUNTIES.	Funded Debt.	Floating Debt.	Rate of Interest.	Cash in hands of Treasurers Ap- plicable to Payment of such Debt.	Value of Property Owned by Counties.	Total Assessed Value of Prop- erty.	Rate of Taxation on each \$100 Valuation.		
							State.	County.	Total.
Alameda	\$110,000 00	\$5,925 81	6, 8	\$40,338 08	\$760,000 00	\$71,896,182 00	\$0 72.2	{ \$0 42.8	\$1 15
Alpine		25,274 05		400 49	1,600 00	282,835 00	72.2	{ 72.8	1 45
Amador		4,954 30			65,500 00	4,281,860 00	72.2	{ 227.8	3 00
Butte	61,000 00	13,209 73	5, 10	4,622 41	60,000 00	20,730,252 00	72.2	{ 107.8	1 80
Calaveras	30,000 00	22,638 29	8	738 29	18,000 00	4,315,361 00	72.2	{ 57.8	1 30
Colusa					100,000 00	24,365,995 00	72.2	{ 82.8	1 55
Contra Costa	18,000 00		6	829 31	42,000 00	15,194,592 00	72.2	{ 122.8	1 95
Del Norte							72.2	{ 37.8	1 00
El Dorado	181,000 00		5	4,894 27		1,925,061 00	72.2	{ 67.8	1 40
Fresno	95,000 00		6, 7	2,710 59	30,000 00	3,879,887 00	72.2	{ 87.8	1 60
Humboldt	102,000 00	1,175 00	9	13,377 15	240,000 00	35,387,173 00	72.2	{ 127.8	2 00
Inyo	70,500 00	4,136 00	7	3,145 45	15,000 00	1,548,695 00	72.2	{ 152.8	2 25
Kern	30,000 00		7, 8		48,000 00	11,831,780 00	72.2	{ 61.0	1 33.2
Lake	47,800 00		5	230 15	20,000 00	4,022,484 00	72.2	{ 77.8	1 50
Lassen		2,105 29			15,000 00	2,527,449 00	72.2	{ 62.8	1 35
Los Angeles	751,500 00		4½, 6	25,049 37	485,000 00	18,440,872 00	72.2	{ 87.8	1 60
Marin	318,000 00	920 89	5, 6, 7	8,279 31	115,000 00	11,108,657 00	72.2	{ 177.8	2 50
Mariposa		1,787 47			47,000 00	1,849,641 00	72.2	{ 102.8	1 75
Mendocino	149,500 00		4, 8, 9	79,179 75	65,000 00	11,944,265 00	72.2	{ 109.8	1 82
Merced	128,900 00		4½, 5	3,273 16	82,500 00	14,146,845 00	72.2	{ 117.8	1 90
Modoc					7,800 00	2,993,084 00	72.2	{ 77.8	1 50
Monterey	20,000 00		5		26,075 00	941,010 00	72.2	{ 107.8	1 80
							72.2	{ 62.3	1 24.5
							72.2	{ 67.8	1 40
							72.2	{ 175.8	2 48
							72.2	{ 87.8	1 60
							72.2	{ 127.8	2 00
							72.2	{ 72.8	1 35
							72.2	{ 162.8	1 75
							72.2	{ 102.8	1 75
							72.2	{ 202.8	2 75

Sonoma	168,000 00	44	-----	-----	310,250 00	31,222,671 00	72.2	52.8	1 25
Stanislaus	25,000 00	6	19,592 00	7,161 89	55,850 00	16,281,737 00	72.2	72.8	1 45
Sutter	-----	-----	-----	-----	-----	10,079,898 00	72.2	64.8	1 25
Tehama	105,500 00	5	-----	810 22	75,000 00	11,901,255 00	72.2	60.8	1 37
Trinity	-----	-----	41,594 41	-----	11,000 00	1,153,344 00	72.2	86.8	1 59
Tulare	83,000 00	4½, 7, 10	-----	1,311 57	100,000 00	23,957,013 00	72.2	102.8	1 75
Tuolumne	-----	-----	-----	14,538 00	34,000 00	2,716,465 00	72.2	227.8	3 00
Ventura	14,000 00	5	-----	515 33	85,000 00	8,598,932 00	72.2	47.8	1 20
Yolo	72,000 00	5	-----	133 83	73,000 00	20,911,325 00	72.2	67.8	1 40
Yuba	111,000 00	6	1,314 31	103 01	105,500 00	7,046,316 00	72.2	107.8	1 80
Orange	-----	-----	8,021 87	243 89	-----	9,270,767 00	72.2	137.8	2 10
Totals	\$7,031,372 72	-----	\$254,453 94	\$1,160,106 46	\$28,670,146 00	\$1,111,590,879 00	-----	72.8	1 45
							-----	92.8	1 65

NOTE.—The financial statements of the following named counties were not transmitted to this office, viz.: Del Norte, San Mateo, and Sutter. See detailed statement of indebtedness of counties for 1890 at end of this report.

ALAMEDA COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
438,320	\$17,810,081	\$3,121,815	\$31,272,740	\$17,568,688	\$49,082,821	\$20,690,503	\$6,619,639	\$2,015,759	\$76,269,176	\$0 58	\$0 42 72	\$1 00 1 30

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
County Building -----		March 25, 1874 -----	\$200,000	1874	\$80,000	1894	8	{ January and July of each year.
Total amount of Bonds outstanding -----								Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal -----						\$80,000 00		
Floating Debt, interest -----						12,921 00		
						150 00		
Total Debt -----						\$93,071 00		\$48,338 00

Description and Value of Public Buildings.

Blocks 42 and 43, in the city of Oakland	\$400,000
Court House, Jail, Receiving Hospital, Hall of Records	300,000
County Hospital and Grounds, near San Leandro	60,000
Total	\$760,000

AMADOR COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100. for Year 1889.		
										State.	County.	Total.
251,083	\$2,074,975	\$692,210	\$191,850	\$548,050	\$2,265,925	\$3,506,185	\$665,205	\$62,297	\$4,233,687	\$0 58	\$1 17	\$1 75

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
None								
Total amount of Bonds outstanding							None.	Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal							\$1,975 52	
Floating Debt, interest							2,824 89	
Total Debt							\$4,800 41	

Description and Value of Public Buildings.

Court House and Jail, and lot.	\$25,000
Hospital grounds and buildings	20,000
Furniture, books, etc., in Court House	15,000
Furniture, etc., in hospital	5,000
Total	\$65,000

BUTTE COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
759,006	\$42,503,245	\$971,675	\$1,018,845	\$1,345,620	\$13,522,190	\$2,317,295	\$2,552,477	\$851,072	\$19,242,934	\$0 58	\$0 62 82	\$1 20 1 40

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Bonds issued for the payment of Railroad Bonds		March 4, 1883	\$73,000 00 3,310 50	1885 1869	\$57,000 00 3,310 50	1900	5 10	Mar. 1 and Sept. 1. Jan. 1 and July 1.
School Warrant No. 122								
Total amount of Bonds outstanding								Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal						\$57,000 00		
Floating Debt, interest						14,647 15		
Total Debt						\$71,647 15		\$2,167 87

Description and Value of Public Buildings.

Court House, of brick	\$35,000
Block on which it stands	3,000
County Hospital, of brick, and land on which it stands	22,000
Total	\$60,000

CALAVERAS COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Im- provements on Real Estate.	Value of Per- sonal Prop- erty, includ- ing Money.	Value of Railroads As- sessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.		
										State.	County.	Total.
369, 480	\$3, 324, 490	\$672, 240	\$74, 405	\$327, 000	\$2, 398, 895	\$996, 240	\$855, 740	\$82, 982	\$4, 336, 857	\$0 58	\$1 22	\$1 80

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Bonds of 1868		March 25, 1868	\$156,900	1868 to 1872	\$53,900	1893	8	Jan. 1 each year.
Total amount of Bonds outstanding								
Floating Debt, principal (State loan)						\$53,900 00		Cash in the County
Floating Debt, interest						18,488 47		Treasury applicable to payment of in- debtedness.
Total Debt						\$72,388 47		\$15,197 23

Description and Value of Public Buildings.

Hospital Buildings and Grounds	\$20,000
Court House, Jail, and Yard	12,000
Total	\$32,000

COLUSA COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Im- provements on Real Estate.	Value of Personal Prop- erty, includ- ing Money.	Value of Railroads As- sessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.		
										State.	County.	Total.
1,170,208	\$18,585,334	\$906,330	\$403,970	\$774,175	\$18,989,304	\$1,680,505	\$3,006,845	\$619,935	\$24,296,589	\$0 58	{ \$0 22 62	\$0 80 1 20

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.			Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.									
None									
Total amount of Bonds outstanding								None.	Cash in the County
Floating Debt, principal								None.	Treasury applicable
Floating Debt, interest								None.	to payment of in- debtedness.
Total									\$68,278 20

Description and Value of Public Buildings.

Court House and Grounds	\$35,000
Hall of Records and Furniture	25,000
Jail	20,000
Hospital and Grounds	20,000
Total	\$100,000

CONTRA COSTA COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements City and Town thereon.	Value of Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.		
										State.	County.	Total.
406,434	\$9,227,069	\$1,778,223	\$445,164	\$602,515	\$9,672,233	\$2,380,738	\$2,568,320	\$541,063	\$1,552,354	\$0 58	{ \$0 72 38 }	\$1 30 96

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.			Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.									
Contra Costa County Bonds.....			Chapter II of Title II of Part 4, Pol. Code; dated Oct. 11, 1880..	\$38,000	1880	\$15,000	1900	6	Semi-annually — July and June.
Total amount of Bonds outstanding									
Floating Debt, principal								\$15,000	Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, interest.....									
Total Debt.....								\$15,000	\$430 30

Description and Value of Public Buildings.

Hall of Records.....	\$16,000
Court House and block of land.....	20,000
Hospital Building and Grounds.....	6,000
Total	\$42,000

DEL NORTE COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Im- provements on Real Estate.	Value of Personal Prop- erty, includ- ing Money.	Value of Railroads As- sessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
280,239	\$1,251,765	\$213,330	\$63,695	\$144,275	\$1,315,460	\$357,605	\$215,866	.....	\$1,888,931	\$0 58	.....	.....

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Funded Debt Bonds of 1884	.....	March 14, 1883	\$12,000	1884	\$12,000	1904	7	January and July.
Total amount of Bonds outstanding	.....						
Floating Debt, principal	.....						\$12,000	Cash in the County Treasury applicable to payment of in- debtedness.
Floating Debt, interest	.....						
Total Debt	.....						\$12,000	.....

Description and Value of Public Buildings.

Court House and Jail	\$19,000
Furniture, etc.	3,000
Total	\$22,000

EL DORADO COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.		
										State.	County.	Total.
369,388	\$1,691,065	\$648,405	\$132,215	\$310,425	\$1,823,280	\$958,830	\$778,740	\$237,897	\$3,798,747	\$0 58	\$1 52	\$2 10

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Bonds of the County of El Dorado		March 14, 1883	\$200,000	1887	\$173,000	1907	5	1st of Dec. and June.
Total amount of Bonds outstanding								
Floating Debt, principal						\$173,000 00		Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, interest								
Total Debt.						\$173,000 00		\$4,506 29

Description and Value of Public Buildings.

Hospital Buildings, Court House, Jail, and Vault	\$20,000
--------------------------------------------------	----------

HUMBOLDT COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.		
										State.	County.	Total.
I, 267, 372	\$10, 775, 489	\$1, 235, 990	\$1, 825, 276	\$1, 398, 210	\$12, 600, 705	\$2, 634, 200	\$2, 795, 297	-----	\$18, 030, 262	\$0 58	\$0 82 57	\$1 40 1 15

INDEBTEDNESS, JUNE 30, 1890.*

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Wagon Road Bonds		February 28, 1874	\$60,000	1875	*\$35,500	1885 to 1894	9	January 1, yearly.
Wagon Road Bonds No. 2		February 12, 1876	55,000	+1876	54,500	1896	9	January 1, yearly.
Wagon Road Bonds No. 3		March 28, 1876	10,000	1877	10,000	1896	9	January 20, yearly.
Total amount of Bonds outstanding							\$100,000	Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal								
Floating Debt, interest								
Total Debt							\$100,000	\$22,506 84

Description and Value of Public Buildings.

Block of land containing old Court House, \$4,000; old Court House and Clerk's office, \$6,000	\$10,000
Five acres of land containing County Hospital	7,500
Plaza, Eureka, \$40,000; new Court House thereon, \$170,000; furniture, \$12,500	222,500
Total	\$240,000

* Five thousand dollars of Wagon Road Bonds are due and payable, but have not been presented for payment.

† Ten thousand dollars of Wagon Road Bonds No. 2 were not issued until 1878.

INYO COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements City and Town thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100. for Year 1889.		
										State.	County.	Total.
144,493	\$453,158	\$275,134	\$45,245	\$111,385	\$498,403	\$386,519	\$473,431	\$158,683	\$1,517,036	\$0 58	\$1 92	\$2 50

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Inyo County Bonds of 1890.....		May 8, 1884.....	\$70,500	1890	\$70,500	1910	5	Mar. 15 and Sept. 15.
Total amount of Bonds outstanding.....								
Floating Debt, principal.....						\$70,500 00		Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, interest.....								
Total Debt.....						\$70,500 00		

Description and Value of Public Buildings.

Court House, lots, and furniture \$15,000

KERN COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.	
										State.	County.
1,179,124	\$6,728,195	\$411,200	\$813,096	\$436,495	\$7,541,291	\$847,995	\$2,062,993	\$1,525,549	\$11,977,528	\$0 58	\$0 92
										\$0 58	\$1 50

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Kern County Bonds		Section 4088, Political Code.....	\$6,500	1880	\$20,000	1900	7	--- Semi-annually.
Total amount of Bonds outstanding.....								
Floating Debt, principal.....						\$20,000 00		Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, interest.....								
Total Debt.....						\$20,000 00		

Description and Value of Public Buildings.

Court House and Jail.....	\$40,000
Hospital.....	7,000
Thirty acres of land.....	1,000
Total.....	\$48,000

LAKE COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Im- provements on Real Estate.	Value of Personal Prop- erty, Includ- ing Money.	Value of Railroads As- sessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
271,551	\$2,305,930	\$550,216	\$190,921	\$220,268	\$2,496,851	\$770,484	\$580,018	-----	\$2,847,353	\$0 58	\$1 12	\$1 70

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT. Names by which Bonds are known.	Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Bonds of Lake County	-----	\$47,800	1887	\$47,800	1907	5	-----Semi-annually.
Total amount of Bonds outstanding	-----	-----	-----	-----	-----	-----	-----
Floating Debt, principal	-----	-----	-----	-----	-----	\$47,800	Cash in the County Treasury applicable to payment of in- debtedness.
Floating Debt, interest	-----	-----	-----	-----	-----	-----	-----
Total Debt	-----	-----	-----	-----	-----	\$47,800	-----

Description and Value of Public Buildings.

Court House and Yard ----- \$20,000

LASSEN COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements City and Town Lots.	Value of Improvements thereon.	Total Value of Improvements on Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.	
									State.	County. Total.
347,181	\$1,182,581	\$338,008	\$500 37	\$115,997	\$1,232,618	\$454,005	\$77,458	\$2,504,319	\$0 58	\$1 32 \$1 90

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Milford School Bond District.....		March 7, 1881	\$1,400	1888	\$1,050	1896	8	Sept. 1, each year.
Juniper School Bond District.....		March 7, 1881	500	1888	400	1898	8	Sept. 1, each year.
Cedar Run School Bond District.....		March 7, 1881	800	1888	640	1898	8	Sept. 1, each year.
Pine Grove School Bond District.....		March 7, 1881	500	1888	400	1898	8	Sept. 1, each year.
Bieber School Bond District.....		March 7, 1881	1,500	1889	1,350	1899	8	Nov. 1, each year.
Washington School Bond District.....		March 7, 1881	550	1889	550	1894	8	Nov. 1, each year.
Jefferson School Bond District.....		March 7, 1881	500	1889	500	1894	8	Sept. 1, each year.
Total amount of Bonds outstanding.....							\$4,890 00	Cash in the County Treasury applicable to payment of in-
Floating Debt, principal.....							1,353 86	debtedness.
Floating Debt, interest.....							67 64	
Total Debt.....							\$6,311 50	\$13 47

Description and Value of Public Buildings.

Court House and Grounds.....	\$8,000
Clerk and Recorder's Office and Jail.....	5,000
County Hospital and one hundred and sixty acres of land.....	2,000
Total.....	\$15,000

LOS ANGELES COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements City and Town thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.	
										State.	County.
983,497	\$16,602,495	\$2,294,220	\$28,852,500	\$12,159,080	\$45,454,965	\$14,453,300	\$7,213,315	\$2,353,415	\$69,475,025	\$0 58	\$0 92 +62
											\$1 50 +1 20

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Bonds of 1881	March 3, 1881	\$46,000	1881	\$13,000	1901	6	---	Semi-annually.
Bonds of 1882	March 3, 1881	45,000	1882	45,000	1902	6	---	Semi-annually.
Bonds of 1884	March 3, 1881	84,500	1884	84,500	1904	6	---	Semi-annually.
Bonds of 1885	March 14, 1883	437,000	1885	407,000	1905	4½	---	Semi-annually.
Bonds of 1888	March 14, 1883	200,000	1888	190,000	1908	4½	---	Semi-annually.
Total amount of Bonds outstanding							\$739,500	Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal							None.	
Floating Debt, interest								
Total Debt							\$739,500	\$17,840 35

Description and Value of Public Buildings.

Old Court House, \$100,000; new Court House, \$550,000; County Jail, \$60,000	\$710,000
County Hospital, \$50,000; County Farm, \$35,000; Real Estate, \$30,000	115,000
Total	\$825,000

* Outside. † Inside.

MARIN COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements City and Town thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Im- provements on Real Estate.	Value of Personal Prop- erty, includ- ing Money.	Value of Railroads As- sessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.		
										State.	County.	Total.
304,751	\$6,128,073	\$1,025,515	\$1,342,167	\$1,139,750	\$7,470,240	\$2,165,265	\$1,217,844	\$563,063	\$11,416,412	\$0 58	\$0 55 72	\$1 13 1 30

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.									
Names by which Bonds are known.	Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.		
North Pacific Coast Railroad Refunding First Series Refunding Second Series Refunding Third Series Deficiency Bonds San Rafael School District Building. Richardson	April 4, 1870	\$160,000	1876	\$160,000	1896	7	...Jan. and July 1st		
	March 25, 1881	40,000	1881	24,000	1904	5	Jan. and July 15th.		
	March 23, 1882	54,000	1882	43,000	1902	5	Jan. and July 15th.		
	March 15, 1883	20,000	1885	16,000	1905	5	Jan. and July 20th.		
	March 15, 1883	50,000	1885	24,000	1903	5	Jan. and July 20th.		
	March 7, 1881	25,000	1886	25,000	1895	6	May and Nov. 7th.		
	March 7, 1881	8,000	1888	8,000	1896	6	----- May 13th.		
							----- January 14th.		
			\$537,000		\$500,000				
Total amount of Bonds outstanding Floating Debt, principal Floating Debt, interest						\$300,000 2,015 60	Cash in the County Treasury applicable to payment of indebtedness.		
						\$302,075	\$8,275 98		

MARIPOSA COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Im- provements on Real Estate.	Value of Personal Prop- erty, includ- ing Money.	Value of Railroads As- sessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.		
										State.	County.	Total.
338,285	\$1,200,586	\$228,936	\$19,891	\$86,420	\$1,220,477	\$295,356	\$375,634		\$1,891,467	\$0 58	\$1 56 40	\$2 14 *2 54

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.			Date of Act under which Bonds were Issued.			Amount of Bonds Issued.			Amount of Bonds Outstanding.			Rate of Interest, per cent.			Interest, when Payable.		
Names by which Bonds are known.																	
None																	
Total amount of Bonds outstanding																	
Floating Debt, principal																	
Floating Debt, interest																	
Total Debt												None.			Cash in the County Treasury applicable to payment of in- debtedness.		
												None.					
												None.					

Description and Value of Public Buildings.

Court House and Library	\$20,000
County Jail and Sub-Jails	12,000
County Hospital, Grounds, and Improvement	15,000
Total	\$47,000

* Including road tax.

MENDOCINO COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land	Value of Real Estate other than City and Town Lots.	Value of Improvements City and Town thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.		
										State.	County.	Total.
1,254,058	\$7,260,291	\$954,989	\$515,268	\$656,604	\$7,341,267	\$1,517,258	\$1,917,878	\$257,222	\$11,033,605	\$0 58	\$1 17	\$1 75

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Public Building Fund.		January 18, 1872.	\$39,500	1872	\$39,500	1892	9	Dec. and June.
Road Bonds, First Series, No. 1.		February 20, 1872.	31,500	1872	21,000	1897	8	January 1st.
Road Bonds, Second Series, No. 2.		May, July, and August, 1874.	13,000	1875	13,000	1894	8	June 1st.
4 per cent Bonds		Political Code, Section 4048.	68,000	1886	68,000	1901	4	January and July.
Total amount of Bonds outstanding.						\$141,000 00	00	Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal.						None.		
Floating Debt, interest.						None.		
Total Debt.						\$141,000 00	00	None.

Description and Value of Public Buildings.

County Court House.....	\$40,000
County Farm.....	15,000
Total.....	\$45,000

MERCED COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.		
										State.	County.	Total.
1,070,485	\$9,890,216	\$429,503	\$890,690	\$428,919	\$10,780,806	\$858,422	\$1,583,013	\$849,598	\$14,071,939	\$0 58	\$0 92 50	\$1 50 1 10

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.								
Names by which Bonds are known.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Bonds of 1883	-----	March 3, 1881	-----	-----	-----	-----	5	----- Semi-annually.
Bonds of 1887	-----	March 14, 1883 and March 18, 1885.	\$65,500 102,900	1883 1887	\$26,000 102,900	1903 1907	4½	----- Semi-annually.
Total amount of Bonds outstanding		-----	-----	-----	-----	\$128,900 00	-----	Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal		-----	-----	-----	-----	-----	-----	-----
Floating Debt, interest		-----	-----	-----	-----	-----	-----	-----
Total Debt		-----	-----	-----	-----	\$128,900 00	-----	\$2,016 58

Description and Value of Public Buildings.

Court House Building	-----	\$75,000
Jails at Merced, Los Banos, Plainsburg, and Snelling	-----	1,500
County Hospital	-----	6,000
Total	-----	\$82,500

MODOC COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
									State.	County.	Total.
278,737	\$1,164,782	\$436,688	\$193,030	\$1,212,159	\$629,718	\$1,241,208	-----	\$3,083,085	\$0 58	\$1 12	\$1 70

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.							
Names by which Bonds are known.	Date of Act under which Bonds were issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
None							
Total amount of Bonds outstanding							
Floating Debt, principal					\$2,858 68		Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, interest							
Total Debt					\$2,858 68		

Description and Value of Public Buildings.

One lot of Land (Court House Square)	\$800
Court House, Offices, and County Jail	4,500
Auditor's and Recorder's Office, with Vault	2,500
Total	\$7,800

MONO COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
89,153	\$306,761	\$214,837	\$11,505	\$61,350	\$318,266	\$276,187	\$249,953	\$71,317	\$915,723	\$0 58	\$2 02	\$2 60

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Funded Debt Bonds		March 14, 1883	\$35,000	1887	\$20,000	1907	5	{ March and Sept. } 20th, each year.
Total amount of Bonds outstanding.								
Floating Debt, principal.						\$20,000 00		Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, interest								
Total Debt						\$20,000 00		\$265 50

Description and Value of Public Buildings.

Court House	\$38,000
Jail	7,500
Total	\$45,500

MONTEREY COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements City and Town thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Im- provements on Real Estate.	Value of Personal Prop- erty, includ- ing Money.	Value of Railroads As- sessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.		
										State.	County.	Total.
1,146,887	\$9,151,596	\$942,850	\$1,304,900	\$806,630	\$10,456,496	\$1,749,480	\$2,205,150	\$1,282,069	\$13,943,715	\$0 58	\$1 17	\$1 75

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Court House and Jail Bonds		January 22, 1878 August, 1888.	\$60,000	1878	\$60,000	1903	7	Semi-annually.
Bridge Bonds of 1888			150,000	1888	130,000	1908	5	Semi-annually.
Total amount of Bonds outstanding								Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal						\$190,000 00		
Floating Debt, interest								
Total Debt						\$190,000 00		

Description and Value of Public Buildings.

Court House, Jail, and Furniture	\$70,000
Old Court House lot	2,000
Hospital and Furniture	15,000
Total	\$87,000

NAPA COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.		
										State.	County.	Total.
381.986	\$5,773,333	\$2,290,400	\$1,224,765	\$1,795,930	\$6,998,100	\$4,086,330	\$2,842,214	\$961,183	\$14,887,927	\$0 58	{ *\$0 92 +59 }	*\$1 50 +1 17

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Court House and Jail Bonds	-----	March 27, 1878.	\$66,000	1879	\$33,000	1905	5	January and July.
Funded Debt Bonds (Railroad Bonds)	-----	April 16, 1880	228,000	1880	109,000	1900	6	January and July.
Total amount of Bonds outstanding		-----						
Floating Debt, principal	-----						\$133,000	Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, interest	-----							
Total Debt	-----						\$133,000	

Description and Value of Public Buildings.

Court House, Jail, and Grounds	\$120,000
County Hospital and Grounds	15,000
Total	\$135,000

* Outside. † Inside.

NEVADA COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
315,611	\$2,065,890	\$961,940	\$284,630	\$844,410	\$2,350,520	\$1,806,350	\$1,152,405	\$602,133	\$5,911,408	\$0 58	{ *\$1 47 { +1 87	\$2 05 2 45

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Nevada County Bonds	-----	March 15, 1883	\$16,700	1883	None.	1888	7	First Monday in January and July.
Nevada County Bonds	-----	March 15, 1883	16,700	1883	None.	1892	7	
Nevada County Bonds	-----	March 15, 1883	16,600	1883	\$8,100	1894	7	
Total amount of Bonds outstanding		-----	-----	-----	-----	-----	-----	Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal	-----	-----	-----	-----	-----	-----	\$8,100 00	
Floating Debt, interest	-----	-----	-----	-----	-----	-----	None.	
Total Debt	-----	-----	-----	-----	-----	-----	\$8,100 00	-----

Description and Value of Public Buildings.

Court House, Jail, and Furniture, \$75,000; Treasurer's Office, \$8,000	\$83,000
County Hospital and Land, \$20,000; Branch Jail at Truckee, \$500	20,500
Two Lots in Nevada City, \$500; Law Library, \$100	600
Total	\$104,100

* City lands. † Outside.

ORANGE COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Im- provements on Real Estate.	Value of Personal Prop- erty, includ- ing Money.	Value of Railroads As- sessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100. for Year 1890.		
										State.	County.	Total.
425,978	\$4,144,156	\$590,145	\$1,595,952	\$1,050,270	\$6,140,108	\$1,640,415	\$1,239,550	\$552,736	\$9,572,809	\$0 58	{ *\$1 17 +92	*\$1 75 +1 50

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT. Names by which Bonds are known.	Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Out- standing.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
None							
Total amount of Bonds outstanding							
Floating Debt, principal						None.	Cash in the County
Floating Debt, interest						None.	Treasury applicable
Total Debt.						None.	to payment of in- debtedness.

Description and Value of Public Buildings.

Jail	\$4,000
Lot	1,000
Total	\$5,000
* County. † City.	

PLUMAS COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
303,897	\$1,285,979	\$412,433	\$34,930	\$142,634	\$1,300,909	\$555,067	\$537,233	-----	\$2,333,209	\$0 58	\$1 92	\$2 50

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Bond No. 1		April 16, 1880	\$30,000	1881	\$19,000	1901	6	October and April.
Bond No. 2		April 16, 1880	20,000	1881	14,000	1901	6	May and November.
Bond No. 3		March 14, 1883	24,000	1885	19,500	1905	6	March and Sept.
Total amount of Bonds outstanding							\$52,500	Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal								
Floating Debt, interest								
Total Debt							\$52,500	\$1,770

Description and Value of Public Buildings.

Court House and Jail	-----	\$18,000
Hospital	-----	4,000
Total	-----	\$22,000

PLACER COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.		
										State.	County.	Total.
402,232	\$4,519,265	\$1,129,685	\$402,044	\$714,785	\$4,921,309	\$1,844,470	\$1,424,625	\$1,979,203	\$10,169,607	\$0 58	\$0 87 1 22	\$1 45 1 80

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
None								
Total amount of Bonds outstanding								Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal								
Floating Debt, interest								
Total								

Cash in the County Treasury applicable to payment of indebtedness.

Description and Value of Public Buildings.

Court House and Public Offices	\$10,000
County Hospital	15,000
Total	\$25,000

SAN BENITO COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
433,196	\$4,003,605	\$467,025	\$230,910	\$302,450	\$2,234,515	\$769,475	\$978,329	\$173,891	\$6,156,211	\$0 58	{ *\$1 02 +76	*\$1 60 +1 34

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.			Amount of Bonds Issued.			Amount of Bonds Outstanding.			Interest, when Payable.		
Names by which Bonds are known.			Date of Act under which Bonds were Issued.			Year of Issue.			Year of Maturity.		
Court House Bonds.			March 14, 1883			1887			1907		
Total amount of Bonds outstanding											
Floating Debt, principal									\$37,000		
Floating Debt, interest									None.		
Total Debt									\$37,000		
									Cash in the County Treasury applicable to payment of indebtedness.		

Description and Value of Public Buildings.

Court House and Jail	\$50,000
* Outside. + Inside.	

SAN BERNARDINO COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
659,005	\$9,520,420	\$1,990,935	\$3,469,585	\$2,207,615	\$12,990,005	\$4,198,550	\$1,842,740	\$3,459,145	\$22,490,440	\$0 58	\$0 67 1 02	\$1 25 1 60

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT. Names by which Bonds are known.	Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
County Bonds Nos. 11 to 25	-----	-----	1883	\$6,000	1893	7	----- Semi-annually.
County Bonds Nos. 26 to 30	-----	\$6,000 9,987	1883	9,987	1898	7	----- Semi-annually.
Total amount of Bonds outstanding	-----	-----	-----	-----	-----	-----	-----
Floating Debt, principal	-----	-----	-----	-----	-----	-----	Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, interest	-----	-----	-----	-----	-----	-----	-----
Total Debt	-----	-----	-----	\$15,987	-----	-----	-----

Description and Value of Public Buildings.

County Hospital and Farm	\$30,000
Court House, Jail, and Grounds	75,000
Total	\$105,000

SAN DIEGO COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100. for Year 1890.		
										State.	County.	Total.
1,408,194	\$8,093,955	\$686,420	\$11,907,299	\$3,764,066	\$20,001,254	\$4,450,486	\$3,253,149	\$2,414,983	\$30,119,872	\$0 58	\$0 84 1 14	\$1 42 1 72

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Funded Debt Bonds	County Road and Bridge Bonds	March 18, 1885	\$117,000	1886	\$100,000	1906	4½	January and July.
		March 14, 1883	100,000	1888	100,000	1908	5	January and July.
		February 26, 1889	96,000	1889	96,000	1909	5	January and July.
Total amount of Bonds outstanding								Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal							\$296,000 00	
Floating Debt, interest							32,198 00	
							400 00	
Total Debt							\$328,598 00	\$10,781 10

Description and Value of Public Buildings.

Block of Land, Court House, and Jail	\$225,000
Hospital Grounds and Improvements	15,000
Old Town and Julian City lots and improvements	500
Total	\$240,500

SAN FRANCISCO COUNTY.

Number of Acres of Land, Value of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
27,000	\$165,044,548	\$70,317,220	-----	-----	\$165,044,548	\$70,317,220	\$66,082,372	\$115,370	\$301,559,510	\$0 58	\$1 03	\$1 61

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Bonds of all kinds, Funded Debt, \$1,448,922						1899	6 and 7	Semi-annually:
Total amount of Bonds outstanding						\$1,448,922		Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal								
Floating Debt, interest								
Total Debt						\$1,448,922		\$728,045

Description and Value of Public Buildings.

City Halls, County Jails, Hospitals, Almshouse, House of Correction, and Industrial School	\$7,000,000
Engine Houses and Fire Department property	924,000
School Houses and School Department property	3,500,000
Public Squares, Parks, and Reservations	10,000,000
Cemetery Reservations	500,000
Sundry other city lots	250,000
Channel Street lots, from Ninth to Eighteenth Streets	130,000
Total	\$22,304,000

SAN JOAQUIN COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		Total.
										State.	County.	
870,023	\$22,085,734	\$1,466,617	\$4,284,006	\$3,700,913	\$26,369,740	\$5,167,530	\$4,958,837	\$1,734,381	\$38,230,488	\$0 58	{ *\$0 36 +54	*\$0 94 +1 12

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.			Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.									
San Joaquin County Bonds			March 14, 1883	\$250,000	1887	\$213,000	1907	4	Jan. 1 and July 1 of each year.
Total amount of Bonds outstanding									
Floating Debt, principal							\$213,000 00		Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, interest									
Total Debt							\$213,000 00		\$6,512 28

Description and Value of Public Buildings.

Court House	\$282,641
Court House Square	250,000
County Hospital and thirty-four acres of land	25,000
Lots 2 and 4 in Block 72 east, in city of Stockton	4,000
Total	\$561,641

* Inside. † Outside.

SAN LUIS OBISPO COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
1,346,339	\$8,547,407	\$688,559	\$1,062,817	\$769,942	\$9,551,294	\$1,458,556	\$2,073,158	\$524,826	\$13,607,754	\$0 58	\$0 59 86	\$1 17 1 44

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.									
Names by which Bonds are known.									
Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.			
Special Road Bonds	\$20,000	1876	\$20,000	1891	8	January and July.			
Special Road Bonds	20,000	1876	20,000	1896	8	January and July.			
Special Road Bonds	30,000	1877	30,000	1902	8	January and July.			
Issued under Act March 3, 1881	13,500	1882	33,500	1902	6	Feb. and August.			
Issued under Act March 3, 1881	20,000	1882	20,000	1902	5	Feb. and August.			
Issued under Act March 14, 1883	52,000	1885	50,000	1905	6	January and July.			
Total amount of Bonds outstanding						Cash in the County Treasury applicable to payment of indebtedness.			
Floating Debt, principal						\$153,500			
Floating Debt, interest						None.			
Total Debt						\$153,500			

Description and Value of Public Buildings.

Court House and Grounds and New Hall of Records	\$90,000
Hospital and Grounds and Waterworks	35,000
Lots in City of San Luis Obispo	10,000
Total	\$135,000

SAN MATEO COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
289,931	\$8,627,710	\$2,108,135	\$1,128,900	\$509,575	\$9,756,610	\$3,617,710	\$1,262,765	\$247,291	\$13,884,376	\$0 58	-----	-----

INDEBTEDNESS, OCTOBER 1, 1886.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Road Bonds		March 18, 1874	\$30,000	1874	\$30,000	1894	10	January and July.
Funded Debt Bonds		April 16, 1880	60,000	1881	48,000	1901	6	January and July.
Total amount of Bonds outstanding						\$78,000 00		Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal								
Floating Debt, interest								
Total Debt						\$78,000 00		\$725 55

Description and Value of Public Buildings.

Court House and Jail	\$40,000
County Farm	12,000
Total	\$52,000

SANTA BARBARA COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
1,119,644	\$8,179,112	\$926,855	\$2,763,345	\$1,192,835	\$10,942,457	\$2,119,680	\$1,718,517	\$448,770	\$15,229,434	\$0 58	\$0 47 87	\$1 05 1 45

INDEBTEDNESS, NOVEMBER 10, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Santa Barbara County		March 14, 1883	\$20,000	1886	\$12,000	1895	5	Semi-annually.
Total amount of Bonds outstanding								Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal						\$12,000 00		
Floating Debt, interest						13,001 00		
						None.		
Total Debt						\$25,001 00		\$5,026 00

Description and Value of Public Buildings.

Part of Blocks 106 and 123, city of Santa Barbara	\$15,000
Hospital Farm and improvements	14,000
Court House, Jail and Vaults, and Hall of Records	88,500
Furniture and fixtures	4,000
Total	\$121,500

SANTA CLARA COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements City and Town thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, Including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
615,860	\$24,122,265	\$4,733,810	\$11,478,365	\$5,518,115	\$35,600,630	\$10,251,925	\$5,211,408	\$1,220,849	\$52,284,812	\$0 58	{ \$0 42 +72	{ \$1 00 +1 30

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Redemption Bonds of 1883	-----	April 16, 1880	\$95,000	1883	\$68,500	1903	5	May and Nov. 1.
Redemption Bonds of 1885	-----	March 14, 1883	56,000	1885	42,000	1905	6	Jan. and July 1.
Western Pacific R. R. Aid Bonds of 1885	-----	March 14, 1883	45,000	1885	31,000	1905	4½	April and Oct. 13.
Western Pacific R. R. Aid Bonds of 1885	-----	March 14, 1883	56,000	1885	41,000	1905	4	Aug. and Feb. 19.
Western Pacific R. R. Aid Bonds of 1885	-----	March 14, 1883	45,000	1885	33,000	1905	4	Oct. and April 23.
Redemption Bonds of 1890	-----	March 14, 1883	45,000	1890	45,000	1910	4½	Jan. and July 1.
Total amount of Bonds outstanding		-----						Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal		-----				\$261,500 00		
Floating Debt, interest		-----						
Total Debt		-----				\$261,500 00		

Description and Value of Public Buildings.

Court House and Jail, \$400,000; lot, \$50,000; County Farm and Infirmary (45 acres), \$40,000.	\$490,000
Branch Jail (ten acres), \$3,000; Branch Jail at Mayfield, \$250; Branch Jail at Saratoga, \$300; Branch Jail at Santa Clara, \$2,200	5,750
Total	\$495,750

* Inside. † Outside.

SHASTA COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
501,453	\$2,552,771	\$603,055	\$458,527	\$404,887	\$4,020,240	\$1,007,942	\$1,066,483	\$1,429,992	\$6,516,715	\$0 58	{ \$1 47	\$2 05
											{ 1 77	2 35

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Bonds of 1880								
Bonds of 1889			\$84,000 60,000	1880 1889	\$45,000 60,000	1900 1900	7 5	January and July. Feb. and August.
Total amount of Bonds outstanding								Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal							\$105,000	
Floating Debt, interest							44,447	
							810	
Total Debt							\$150,287	

Description and Value of Public Buildings.

Block 22, Town of Redding, Court House, Jail, and improvements	\$85,000
Old Court House at Shasta and County Hospital	6,000
Total	\$91,000

SIERRA COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.	
										State.	County. Total.
128,635	\$746,811	\$226,248	\$47,400	\$210,961	\$794,211	\$437,209	\$299,290	\$43,969	\$1,574,709	\$0 58	\$2 22 \$2 80

INDEBTEDNESS, JUNE 30, 1890.

Names by which Bonds are known.	FUNDED DEBT.	Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Funded Debt Bonds, 1883.....	March 14, 1883	\$28,600	1883	\$19,900	1903	7	----- First Monday of May and November of each year.
Total amount of Bonds outstanding
Floating Debt, principal	Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, interest
Total Debt	\$19,900	\$28

Description and Value of Public Buildings.

Court House and Jail	\$8,500
County Hospital	3,000
Total	\$11,500

SISKIYOU COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.		
										State.	County.	Total.
410,595	\$2,298,824	\$952,492	\$157,510	\$357,432	\$2,456,334	\$1,309,924	\$1,541,096	\$1,449,156	\$5,307,354	\$0 58	{ \$0 75 92 }	\$1 33 1 50

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Bonds of 1883		March 14, 1883	\$69,700	1883	\$62,100	1904	6	--- Semi-annually.
Bonds of 1890		March 14, 1883	30,000	1890	30,000	1910	6	--- Semi-annually.
Total amount of Bonds outstanding							\$92,100	Cash in the County Treasury Applicable to payment of indebtedness.
Floating Debt, principal								
Floating Debt, interest								
Total Debt							\$92,100	\$1,500

Description and Value of Public Buildings.

Court House, \$10,000; Jail, \$5,000	\$15,000
Hospital Buildings	8,000
Total	\$23,000

SONOMA COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100. for Year 1890.	
										State.	County.
824,975	\$15,388,773	\$3,531,293	\$2,975,305	\$2,863,570	\$18,354,078	\$6,394,813	\$4,071,271	\$1,432,378	\$30,262,540	\$0 58	\$0 49 67

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Hall of Records Bonds	-----	-----	-----	1886	\$10,000	1906	4 1/2	April and October.
Railroad Bonds	-----	-----	-----	1886	247,500	1906	4 1/2	April and October.
Total amount of Bonds outstanding	-----	-----	-----	-----	-----	-----	-----	-----
Floating Debt, principal	-----	-----	-----	-----	-----	-----	-----	-----
Floating Debt, interest	-----	-----	-----	-----	-----	-----	-----	-----
Total Debt	-----	-----	-----	-----	-----	-----	-----	-----

Cash in the County Treasury applicable to payment of indebtedness.

Description and Value of Public Buildings.

Court House and Grounds, \$230,000; Hall of Records, \$22,500	\$252,500
County Farm (96 acres) and Hospital	30,000
Lot in Santa Rosa	10,500
Total	\$293,000

STANISLAUS COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements City and Town thereon.	Value of Lots.	Value of Improvements City and Town thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.		
										State.	County.	Total.
773,566	\$10,488,203	\$814,660	\$701,715	\$848,901	\$11,189,918	\$1,663,561	\$2,351,630	\$754,429	\$15,959,538	\$0 58	\$0 55 75	\$1 13 1 33

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Stanislaus County Bonds		March 14, 1883	\$33,000	1883	\$23,000	1903	6	January and July.
Total amount of Bonds outstanding								
Floating Debt, principal							\$23,000	Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, interest							5,400	
Total Debt							\$28,400	\$7,887 35

Description and Value of Public Buildings.

Court House and Jail, \$35,000; Court House Block, \$15,000	\$50,000
Jails, \$1,850; County Hospital, \$1,000; Hospital Grounds, \$3,000	5,850
Total	\$55,850

SUTTER COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements City and Town thereon.	Value of Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroad Bonds assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
374,531	\$7,162,592	\$635,888	\$104,771	\$155,790	\$7,267,363	\$791,678	\$1,225,770	\$174,085	\$9,459,080	\$0 58	\$0 52	\$1 10

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Road Bonds		March 14, 1883	\$11,000	1883	\$11,000	1903	6	July 1 and Jan. 1.
Total amount of Bonds outstanding								
Floating Debt, principal							\$11,000	Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, interest							273	
Total Debt							\$11,273	

Description and Value of Public Buildings.

Court House	\$20,000
Hospital	1,000
Total	\$21,000

TEHAMA COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
									State.	County.	Total.
1,075,344	\$7,049,848	\$702,415	\$677,919	\$691,793	\$7,727,767	\$1,394,208	\$1,825,836	\$840,925	\$0 58	{ \$0 87 1 02	\$1 45 1 60

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Tehama County Wagon Road Bonds		March 14, 1883	\$37,000	1883	\$29,500	1903	5	--- Semi-annually.
Funded Debt Bonds, 1884		March 14, 1883	61,000	1884	39,500	1904	5	--- Semi-annually.
Funded Debt Bonds, 1887		March 18, 1885	30,000	1887	30,000	1907	5	--- Semi-annually.
Total amount of Bonds outstanding								Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal							\$49,000	
Floating Debt, interest								
Total Debt							\$93,000	\$449 33

Description and Value of Public Buildings.

Court House, Hall of Records, Jail, Grounds, etc.	\$60,000
County Hospital and Grounds	15,000
Total	\$75,000

TRINITY COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100. for Year 1889.	
										State.	County.
125,352	\$430,367	\$238,151	\$26,922	\$74,841	\$487,289	\$312,992	\$336,274	-----	\$1,186,555	\$0 58	\$2 22
											\$2 80

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.											
Names by which Bonds are known.											
Date of Act under which Bonds were Issued.		Amount of Bonds Issued.		Year of Issue.		Amount of Bonds Outstanding.		Rate of Interest, per cent.		Interest, when Payable.	
March 14, 1883		\$47,500		1889		\$45,700		1908		5	
March 14, 1883		14,000		1889		14,000		1908		5	
Trinity County Bonds										Feb'y and August.	
Trinity County Bridge Bonds										Feb'y and August.	
Total amount of Bonds outstanding											
Floating Debt, principal									\$59,700		
Floating Debt, interest											
Total Debt									\$59,700		
Cash in the County Treasury applicable to payment of indebtedness.											

Description and Value of Public Buildings.

Court House and Jail	\$10,000
Hospital and Town Lot	1,000
Total	\$11,000

TULARE COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements City and Town thereon.	Value of Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1890.		
										State.	County.	Total.
1,583,156	\$15,766,924	\$1,007,329	\$1,126,251	\$989,964	\$16,893,175	\$1,997,293	\$2,846,374	\$1,296,598	\$23,033,440	\$0 58	{ \$0 74 77 }	\$1 32 1 35

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Court House Bonds	-----	February 7, 1876	\$55,000	1877	\$44,500	1895	4½	{Second Monday of Jan. of each year.
Road Bonds	-----	February 7, 1876	31,000	1878	24,000	1889	7	
Total amount of Bonds outstanding		-----					\$68,500	Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal		-----						
Floating Debt, interest		-----						
Total Debt		-----					\$68,500	\$1,083 45

Description and Value of Public Buildings.

Court House Building and Lot	-----	\$90,000
Hospital Building and forty-six acres of land	-----	10,000
New County Jail and Lot	-----	30,000
Total	-----	\$130,000

TUOLUMNE COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Rate of Taxation on each \$100, for Year 1889.		
									State.	County.	Total.
301,067	\$1,358,250	\$574,165	\$94,900	\$255,315	\$1,453,150	\$829,480	\$612,015	-----	\$0 58	\$1 02 1 37	\$1 60 1 95

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Total amount of Bonds outstanding								
Floating Debt, principal							\$3,515 24	Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, interest								
Total Debt							\$3,515 24	\$3,515 24

Description and Value of Public Buildings.

Court House	\$20,000
County Jail	5,000
County Hospitals	10,000
Total	\$35,000

VENTURA COUNTY.

Number of Acres of Land, Value of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements City and Town thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
470,079	\$4,237,118	\$325,105	\$740,478	\$450,139	\$5,752,840	\$775,244	\$1,298,413	\$586,946	\$7,588,199	\$0 58	\$80 57 1 97	\$1 15 1 55

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Ventura County Bonds.....		August 9, 1882	\$20,000	1882	\$14,000	1902	5	Jan. 1 and July 1.
Total amount of Bonds outstanding								
Floating Debt, principal							\$14,000	Cash in the County Treasury applicable to Payment of indebtedness.
Floating Debt, interest								
Total Debt							\$14,000	\$645 02

Description and Value of Public Buildings.

Court House and Lot.....	\$20,000
Jail and Lot.....	20,000
County Hospital and Lot.....	10,000
Total.....	\$50,000

YOLO COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Rate of Taxation on each \$100, for Year 1889.		Total.
								State.	County.	
484,216	\$13,601,915	\$1,042,309	\$985,360	\$1,374,640	\$14,537,275	\$2,647,775	\$1,131,299	\$0 58	\$0 82 1 47	\$1 40 1 05

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Ratio of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Funded Debt Bonds		October 12, 1885	\$93,500	1885	\$61,500	1894	5	-----Semi-annually.
Total amount of Bonds outstanding								Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal							\$61,500 00	
Floating Debt, interest							33 913 64	
							106 80	
Total Debt							\$95,520 44	\$29,549 62

Description and Value of Public Buildings.

Court House, Lot, and Hall of Records	\$55,000
Hospital Building, Lot, and Poor Farm	18,000
Total	<u>\$73,000</u>

YUBA COUNTY.

Number of Acres of Land, Values of the Several Classes of Property, and Rate of Taxation for the Year 1890.

Number of Acres of Land.	Value of Real Estate other than City and Town Lots.	Value of Improvements thereon.	Value of City and Town Lots.	Value of Improvements thereon.	Total Value of Real Estate.	Total Value of Improvements on Real Estate.	Value of Personal Property, including Money.	Value of Railroads Assessed by State Board of Equalization.	Total Value of all Property.	Rate of Taxation on each \$100, for Year 1889.		
										State.	County.	Total.
410,965	\$3,341,105	\$376,065	\$522,745	\$1,035,675	\$3,863,850	\$1,411,740	\$1,394,750	\$334,401	\$7,004,741	\$0 58	\$0 88 1 27	\$1 46 1 85

INDEBTEDNESS, JUNE 30, 1890.

FUNDED DEBT.		Date of Act under which Bonds were Issued.	Amount of Bonds Issued.	Year of Issue.	Amount of Bonds Outstanding.	Year of Maturity.	Rate of Interest, per cent.	Interest, when Payable.
Names by which Bonds are known.								
Bonds of 1872	-----	March 28, 1872	\$60,000	1872	\$10,000	1892	6	Jan. 1 and July 1.
Bonds of 1882 (refunding)	-----	April 6, 1880	131,000	1882	91,000	1902	6	Jan. 1 and July 1.
Total amount of Bonds outstanding		-----						Cash in the County Treasury applicable to payment of indebtedness.
Floating Debt, principal		-----					270	
Floating Debt, interest		-----						
Total Debt		-----					\$101,270	\$1,298 90

Description and Value of Public Buildings.

Court House, \$25,000; Jail, \$3,000; Sheriff's Residence, \$5,000	\$33,000
Hospital	25,000
Total	\$58,000

BIENNIAL REPORT

OF THE

SECRETARY OF STATE

TO THE

STATE OF CALIFORNIA,

FOR THE TWO YEARS ENDING JUNE 30, 1890.



SACRAMENTO:

STATE OFFICE, : : : : : J. D. YOUNG, SUPT. STATE PRINTING.

1890.

STATE OF CALIFORNIA, DEPARTMENT OF STATE, }
SACRAMENTO, November 20, 1890. }

Hon. R. W. WATERMAN, Governor of California:

SIR: Herewith I have the honor to submit the biennial report of the Secretary of State for the fortieth and forty-first fiscal years, ending June 30, 1890.

W. C. HENDRICKS,
Secretary of State.

REPORT.

To Hon. R. W. WATERMAN, Governor of California:

SIR: In accordance with pleasure and duty, I have the honor to report to you the transactions of this department from my last report, June 30, 1888, up to June 30, 1890, as per the following statement from office books of the various accounts:

STATIONERY, FUEL, LIGHTS, AND SUPPLIES.

FORTIETH FISCAL YEAR.

July 1, 1888—Appropriation	\$7,500 00
July 1, 1888—Balance from thirty-ninth fiscal year	995 77
Mar. 8, 1889—Deficiency appropriation	1,500 00
June 30, 1889—Expended	\$9,994 37
June 30, 1889—Unexpended balance	1 40
	<hr/>
Outstanding bills unpaid	\$9,995 77
	2,331 00

FORTY-FIRST FISCAL YEAR.

July 1, 1889—Appropriation	\$10,000 00
June 30, 1890—Expended	\$9,929 32
June 30, 1890—Unexpended balance	70 68
	<hr/>
	\$10,000 00

POSTAGE, EXPRESSAGE, AND TELEGRAPHING.

FORTIETH FISCAL YEAR.

July 1, 1888—Balance from thirty-ninth fiscal year	\$646 78
June 30, 1889—Expended	\$646 40
June 30, 1889—Unexpended balance	38
	<hr/>
	\$646 78

FORTY-FIRST FISCAL YEAR.

July 1, 1889—Appropriation for forty-first and forty-second fiscal years	\$2,000 00
June 30, 1890—Expended	\$983 80
June 30, 1890—Unexpended balance	1,016 20
	<hr/>
	\$2,000 00

REPAIRS TO CAPITOL, FURNITURE, AND CARPETS.

FORTIETH FISCAL YEAR.

July 1, 1888—Appropriation	\$7,500 00
July 1, 1888—Balance from thirty-ninth fiscal year	100 06
Mar. 11, 1889—Appropriation	2,000 00
June 30, 1889—Expended	\$9,592 42
Unexpended balance	7 64
	<hr/>
	\$9,600 06

FORTY-FIRST FISCAL YEAR.

July 1, 1889—Appropriation	\$21,500 00
June 30, 1890—Expended	\$21,486 09
Unexpended balance	13 91
	<hr/>
	\$21,500 00

ARCHIVES VAULT BUILDING FUND.

Mar. 11, 1889—Appropriation	\$10,000 00
Dec. 31, 1889—Expended	\$6,465 12
Unexpended balance	3,534 88
	<hr/>
	\$10,000 00

WATER IN BUILDING.

FORTIETH FISCAL YEAR.

July 1, 1888—Appropriation.....		\$600 00
June 30, 1889—Expended.....	\$600 00	

\$600 00

FORTY-FIRST FISCAL YEAR.

July 1, 1889—Appropriation.....		\$600 00
June 30, 1890—Expended.....	\$600 00	

\$600 00

CONTINGENT EXPENSES.

FORTIETH FISCAL YEAR.

July 1, 1888—Appropriation.....		\$100 00
June 30, 1889—Expended.....	\$95 40	
Unexpended balance.....	4 60	

\$100 00

FORTY-FIRST FISCAL YEAR.

July 1, 1889—Appropriation.....		\$250 00
June 30, 1890—Expended.....	\$203 95	
Unexpended balance.....	46 05	

\$250 00

BALLOT PAPER.

Mar. 11, 1889—Appropriation for deficiency of thirty-eighth and fortieth fiscal years.....		\$5,812 32
June 30, 1889—Expended for thirty-eighth fiscal year.....	\$869 72	
Expended for fortieth fiscal year.....	4,941 91	
Unexpended balance.....	69	

\$5,812 32

FORTY-FIRST FISCAL YEAR.

July 1, 1889—Appropriation.....		\$4,000 00
June 30, 1890—Expended.....	\$4,000 00	
Outstanding bills unpaid.....		4,968 00

RECEIPTS FROM ALL SOURCES.

FORTIETH FISCAL YEAR.

July, 1888.....	\$1,337 25	
August, 1888.....	1,354 75	
September, 1888.....	1,461 25	
October, 1888.....	3,179 50	
November, 1888.....	1,764 50	
December, 1888.....	1,846 45	
January, 1889.....	1,857 75	
February, 1889.....	1,662 50	
March, 1889.....	2,331 00	
April, 1889.....	2,823 75	
May, 1889.....	2,487 75	
June, 1889.....	4,607 75	

\$26,714 20

FORTY-FIRST FISCAL YEAR.

July, 1889.....	\$1,743 25	
August, 1889.....	1,516 05	
September, 1889.....	1,364 75	
October, 1889.....	1,669 75	
November, 1889.....	1,752 75	
December, 1889.....	1,477 25	
January, 1890.....	1,584 50	
February, 1890.....	1,362 50	
March, 1890.....	1,879 75	
April, 1890.....	2,059 50	
May, 1890.....	2,002 75	
June, 1890.....	1,747 00	

20,159 80

Total.....\$46,874 00

JANITOR'S DEPARTMENT.

ACCOUNT OF STATIONERY DISTRIBUTED.

FORTIETH FISCAL YEAR.

Total furnished State officers.....	\$2,123 34
Total furnished Senate	97 24
Total furnished Assembly	227 36
Total furnished committees, clerks, and attachés.....	1,750 00

\$4,197 94

FORTY-FIRST FISCAL YEAR.

Total furnished State officers.....	\$2,295 25
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CALIFORNIA REPORTS.

BALANCE ON HAND JULY 1, 1888.	Distributed.	Balance on hand July 1, 1890.
Volume 41	8	589
Volume 42	8	525
Volume 43	6	484
Volume 44	7	581
Volume 45	8	590
Volume 46	7	814
Volume 49 (received since last report, 7).....	1	1
Volume 51 (received since last report, 4).....	1	5
Volume 52	21	8
Volume 53	8	7
Volume 55 (received since last report, 3).....	6	7
Volume 56	9	6
Volume 57	12	6
Volume 58	10	6
Volume 59	17	8
Volume 60	18	8
Volume 61	17	10
Volume 62	21	8
Volume 63	19	8
Volume 64	21	7
Volume 65	18	8
Volume 66	16	7
Volume 67	23	12
Volume 68	23	11
Volume 69	22	9
Volume 70	26	12
Volume 71	32	12
Volume 72	33	17
Volume 73 (received August 16, 1888)	300	285
Volume 74 (received January 16, 1889)	300	282
Volume 75 (received March 7, 1889).....	300	286
Volume 76 (received May 21, 1889).....	300	288
Volume 77 (received September 1, 1889).....	300	286
Volume 78 (received November 5, 1889).....	300	283
Volume 79 (received December 4, 1889).....	300	285
Volume 80 (received February 3, 1890)	300	283
Volume 81 (received April 4, 1890)	300	281
Volume 82 (received June 10, 1890).....	300	279

SPANISH LAWS.

July 1, 1888—Balance on hand	32
Sold and distributed.....	2
July 1, 1890—Balance on hand.....	30

STATUTES OF 1875-6.

July 1, 1888—Balance on hand.....	452
Sold and distributed.....	11
July 1, 1890—Balance on hand.....	441

STATUTES OF 1877-8.

July 1, 1888—Balance on hand.....	428
Sold and distributed.....	13
July 1, 1890—Balance on hand.....	415

STATUTES OF 1880.

July 1, 1888—Balance on hand.....	322
Sold and distributed.....	16
July 1, 1890—Balance on hand.....	306

STATUTES OF 1881.

July 1, 1888—Balance on hand.....	407
Sold and distributed.....	13
July 1, 1890—Balance on hand.....	394

STATUTES OF 1883.

July 1, 1888—Balance on hand.....	319
Sold and distributed.....	21
July 1, 1890—Balance on hand.....	298

STATUTES OF 1884-5.

July 1, 1888—Balance on hand.....	152
Sold and distributed.....	27
July 1, 1890—Balance on hand.....	125

STATUTES OF 1886-7.

July 1, 1888—Balance on hand.....	533
Sold and distributed.....	130
July 1, 1890—Balance on hand.....	403

STATUTES OF 1889.

July 1, 1888—Received from State Printer.....	2,249
Sold and distributed.....	2,019
July 1, 1890—Balance on hand.....	230

CONSTITUTIONAL DEBATES.

July 1, 1888—Balance on hand.....	1,090
Sold and distributed.....	296
July 1, 1890—Balance on hand.....	794

HALL'S IRRIGATION DEVELOPMENT—VOL. I.

July 1, 1888—Balance on hand.....	558
Mar.21, 1889—Received from State Printer.....	1,000
Sold and distributed.....	1,556
July 1, 1890—Balance on hand.....	689
	867

HALL'S IRRIGATION DEVELOPMENT—VOL. II.

Jan.15, 1889—Received from Governor.....	250
Feb.25, 1889—Received from State Printer.....	168
Feb.27, 1889—Received from State Printer.....	100
Feb.28, 1889—Received from State Printer.....	478
Sold and distributed.....	996
July 1, 1890—Balance on hand.....	886
	110

HALL'S TOPOGRAPHICAL AND IRRIGATION MAPS (PLAIN).

July 1, 1888—Balance on hand.....	995 set.
Sold and distributed.....	147 set.
July 1, 1890—Balance on hand.....	848 set.

HALL'S TOPOGRAPHICAL AND IRRIGATION MAPS (MOUNTED).

July 1, 1888—Balance on hand.....	161 set.
Sold and distributed.....	35 set.
July 1, 1890—Balance on hand.....	126 set.

HALL'S GREAT VALLEY MAP (PLAIN).

July 1, 1888—Balance on hand.....	2,284
Sold and distributed.....	62
July 1, 1890—Balance on hand.....	2,222

HALL'S GREAT VALLEY MAP (MOUNTED).

July 1, 1888—Balance on hand.....	244
Sold and distributed.....	6
July 1, 1890—Balance of hand.....	238

HALL'S DETAIL IRRIGATION MAPS (TEN SHEETS).

July 1, 1888—Balance on hand.....	1,339
Sold and distributed.....	32
July 1, 1890—Balance on hand.....	1,307

HALL'S DETAIL IRRIGATION MAPS (TWELVE SHEETS TO SET).

Oct. 12, 1889—Received.....	500 set.
Sold and distributed.....	17 set.
July 1, 1890—Balance on hand.....	483 set.

BALLOT PAPER.

Old stock "Burns" paper.....	695 reams.
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BALLOT PAPER (GREEN TINT).

Balance on hand.....	208½ reams.
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BALLOT PAPER (AT PRESENT IN USE).

Aug. 17, 1888—Received.....	4,026 reams.
Sold.....	2,286 reams.
July 1, 1890—Balance on hand.....	1,740 reams.

Besides the foregoing tables showing the transactions of this department for the above mentioned fiscal years, you will permit a brief allusion to some of the funds involved.

REPAIRS TO CAPITOL FUND.

The last Legislature appropriated \$43,000 to this fund for painting and other repairs to Capitol for the forty-first and forty-second fiscal years.

Only one half of this amount—\$21,500—was available for the forty-first fiscal year. Besides the usual current expenses for the care of the building in this fiscal year, the following extra work was done:

In the Governor's offices three rooms were recarpeted, the walls and

wood work repainted and grained; the ceilings frescoed, and furniture reupholstered, repaired, and varnished; the marble of the mantels cleaned and polished, and the rooms all generally refurnished and beautified.

The two rooms in the Secretary of State's office, two of the Surveyor-General's, two of the Adjutant-General's, and the private office of the State Librarian have all been thoroughly overhauled by repainting and generally recarpeting; also in the addition of shelving and furniture.

Patent backs and regulators have been placed in nearly all the fire-places in the Capitol, thereby adding to comfort and economizing fuel. The gas fixtures through all the offices, and over the entire building, have been, or will be, rebronzed.

The halls on the second and third floors were repainted, and the plastering repaired and kalsomined; stairways varnished and polished; also, the walls of the front halls repainted and the frescoing retouched.

Much repairing and improving were done in the Engineer's Department; the boilers examined and repaired; pipes repaired by covering, replacing, and by the addition of new and additional pipes; the water mains leading to the building have been examined, old and worn pipes replaced by new; additions, connections, and shut-offs have been placed, so as to more perfectly regulate the water and heat for the accommodation of the upper floors; also, a general overhauling of the heating apparatus throughout the building has been done, including entirely new fittings in the State Library; also, new pipes, globe-valves, traps, and couplings connected with the engine, boilers, and pumps. Many of the more important steam pipes have been covered with asbestos, largely increasing the heating capacity and economizing fuel. The report of the Boiler Inspector is on file, showing the boilers in good condition. New iron steam tanks and waste-water tanks have replaced the old worn and unsafe ones.

State officers elect, taking possession of their offices on the first of the year, leave one half of a fiscal year under one administration and the other half under another, which makes confusion and difficulty in making up reports satisfactorily. It is to be regretted that terms of office do not commence and end with the present fiscal year, and changes in office take place at a quiet season of the year, with much less trouble and confusion than under the present system.

While it is left for my successor to report on this, the forty-second fiscal year, yet as one half of it will be under my administration, and the appropriations principally exhausted prior to my successor's incumbency, it may be pertinent to show what use has been and will be made out of the appropriation in the first six months of the forty-second fiscal year, and which is as follows:

The Senate and Assembly Chambers, and the Sergeant-at-Arms' rooms attached thereto, will be entirely repainted and frescoed, plastering repaired, and the desks and furniture repainted, polished, and grained; the plastering on first floor halls repaired and kalsomined, and the wood work painted; the rooms of the Board of Equalization, Supreme Court, Controller, Attorney-General, and Clerk of the Supreme Court, will all be painted and frescoed, and desks, furniture, and wood work painted, varnished, and grained.

A good deal of work has been done and money spent on the roof of the Capitol, so as to prevent any damage or discomfort in the future, and a false roof will be placed underneath to certainly secure such result.

In connection with the work done and to be done under the appropriation to this fund, I wish to pass a credit due to T. W. O'Neil, who superintended the work. I am under great obligation to him for advice and his able help. His artistic taste and talent is of a superior class, which, coupled with a conscientious discharge of duty, has made his services of great value to the State.

BALLOT PAPER.

The appropriation of \$4,500 for the purchase of ballot paper to be used at elections held throughout the State during the period of two years, is inadequate. The experience of this office shows that such appropriation should not be less than \$8,000. The increase in said appropriation will not make any additional expense to the State, for the reason that the proceeds from the sale of ballot paper is returned to the State Treasury. Legislatures seem to anticipate deficiencies by never appropriating sufficient. It would save confusion and trouble to either appropriate sufficiently or else create a revolving Ballot Paper Fund. Not less than \$8,000 should be appropriated for each two fiscal years. The supply necessary was so much larger than the appropriation, and all the receipts from sales, as the law requires, having been turned into the Treasury, leaves a deficiency in unpaid bills of \$4,968 to be provided for by the next Legislature.

To offset this, I would call your attention to the foregoing table, above referred to, showing that the value of the ballot paper on hand more than covers this amount.

STATIONERY, FUEL, LIGHTS, AND SUPPLIES.

On account of the unusual length and expense of the last session of the Legislature, the appropriation for this fund became exhausted, and a deficiency was unavoidable.

It will be necessary for the next Legislature to appropriate \$2,331 to pay deficiency bills against this fund.

ARCHIVES VAULT BUILDING FUND.

The last Legislature appropriated \$10,000 for the purpose of constructing a vault, in which to collect, index, and preserve all the papers, books, etc., not in frequent use, from all the offices of the Capitol. The law required that the vault should be "fire-proof, burglar-proof, moisture-proof, done by days' work," and all under charge of the Secretary of State. It was an awkward job to do by days' work. To build a vault of the size necessary and required by law, and built in the most approved fire, burglar, and moisture-proof manner, would cost four or five times the amount appropriated. Believing that the Legislature realized the fact that such a construction of a vault, as might under ordinary circumstances be necessary to fill the conditions, would not be required under other circumstances, and that a vault constructed in one of the rooms in the basement of the Capitol, simply for the care and safety of books and papers, could be built fire and burglar-proof at much less cost than for a bank, and that such a vault as would meet the object and the spirit of the law could be built within the appropriation. A room directly

under the Secretary of State's office was selected, in which was laid a concrete floor six inches thick, the sides, bottom, and top lined with three-eighths inch steel sheets, placed several inches from the side walls and the bottom and top, leaving a free circulation of air between the walls and the steel lining, with a first class burglar-proof door entrance.

The vault is in size about twenty-two feet one way by twenty-one feet the other and twelve feet high.

There was used in the construction of this vault forty-four thousand one hundred and fifty-one pounds of steel sheets, and fourteen thousand four hundred and thirty-one pounds of iron beams, bars, and bolts, making in all, fifty-eight thousand five hundred and eighty-two pounds of metal, costing \$2,343 28; this, with the labor, concrete foundations, etc., amounts to \$6,465 12, leaving a balance in fund of \$3,534 88.

There being a little feeling, in consequence of the construction of the vault, and the care of the archives having been left with the Secretary of State, and some trouble and detention encountered in having the debts contracted paid, and there also being an uncertainty in the wording of the law making the appropriation, I thought it uncertain, if not unsafe, to incur any further indebtedness against the appropriation; but as it is considered a very great necessity to have the scattered archives of the various State offices collected, indexed, and filed away for safe keeping, may I suggest the importance of so amending the law as to make the appropriation certain, and increase it to not less than \$5,000 with the balance left unexpended. The opinion has been expressed that the construction and care of the Archives Vault should have been left with other than the Secretary of State. Will you permit me very respectfully to express the opinion that the Secretary of State is altogether the most appropriate officer to have charge of the archives, particularly while the law leaves with him the care of the Capitol building. This opinion I feel the more free to express, from the fact that I so soon leave the office to my successor, and which fact will emphasize my sincerity.

In connection with this fund, and the work done under the Act creating it, I wish to acknowledge the obligations due James McGuire, Esq., for his valuable assistance, not only in work done, but in advice given as how best to construct the vault under the terms of the law. Through his influence the State was enabled to purchase the metal used in construction at a much lower rate; and in making many trips to the Capitol in gratuitous consultation, the State has had the benefit of his ability and experience without cost.

RECOMMENDATIONS.

Permit me to quote from, and earnestly review some suggestions made in, my last report: "The fees for filing articles of incorporation are the same for all, without reference to the amount of the capital stock, or whether they are organized for profit, religious, benevolent, or literary purposes. I recommend that the fees be graded according to the amount of the capital stock."

I also call attention to recommendation of one of my predecessors, that the plans and drawings of the capitol having been destroyed by fire in the burning of an architect's residence some years ago, none now exist; and as it is, or might become, very necessary to know the exact

location of gas, water, sewer, or heating pipes, I earnestly join him in recommending that a complete plan of the building be obtained and made of permanent record in this office immediately, as every year makes it harder to obtain this information.

CONCLUSION.

It is with much feeling that I approach the conclusion of probably my last report in a public position, and look forward to a speedy separation from brother State officers and associates in the Capitol building, and particularly those attached to this office. To Deputy Secretary of State Davidson, clerks Egan, Aull, Cosby, and Vera, to janitor Landsborough, engineer Coffey and helper Lusk (the father died in the service and the son now fills his place), to watchmen Rego, Gett, and Craven, to porters Duhain, Steinmetz, Harris, and Clark, I wish to express my warmest appreciation of them, one and all, and of their valuable services and assistance in making my administration of this office (including the care of the building), such as to remain, I hope, a credit to us all in the future.

A more honest, industrious, pleasant, and loyal set of men, in their respective places, probably never came together. Their principal strife has been vying with each other as to who could do the most for the best interest of the State, the pleasure and accommodation of the public, and the success of my incumbency. They have largely assisted in helping me to turn this building over to my successor in a much improved sanitary condition, fresh and clean, and in perfect order from garret to basement.

W. C. HENDRICKS,
Secretary of State.

BIENNIAL REPORT

OF THE

STATE TREASURER

OF THE

STATE OF CALIFORNIA.

FORTIETH AND FORTY-FIRST FISCAL YEARS.

1888-1890.

ADAM HEROLD, STATE TREASURER.



SACRAMENTO:

STATE OFFICE, : : : : : J. D. YOUNG, SUPT. STATE PRINTING.

1890.

REPORT.

STATE OF CALIFORNIA, TREASURY DEPARTMENT, }
SACRAMENTO, September 22, 1890. }

To his Excellency R. W. WATERMAN, Governor of California:

SIR: In conformity with section three hundred and thirty-two, Political Code of the State of California, I beg leave respectfully to submit the following report of the transactions of this department for the fortieth and forty-first fiscal years, ending June 30, 1890, as shown by the following schedules.

Your obedient servant,

ADAM HEROLD,
State Treasurer.

REPORT OF THE STATE TREASURER.

SCHEDULE "A."—Showing the Receipts into the State Treasury

FUNDS.	Balances on Hand July 1, 1888.	A. Herold, State Treasurer.	County Treasurers.
General Fund	\$499,812 80		\$2,835,374 98
School Fund	277,941 95	\$165,484 47	2,336,938 06
Interest and Sinking Fund	243,505 49		196,089 62
State School Land Fund	115,970 52	76,500 00	199,296 07
University Fund	2,563 57	64,253 25	
Library Fund	27,831 46		
Supreme Court Library Fund	297 41		
War Bond Fund	5,347 71		
Election Reward Fund	1,524 18		
Swamp Land District No. 1	142 49		
Swamp Land District No. 2	883 30		
Swamp Land District No. 17	8 00		
Swamp Land District No. 18	1,029 83		10 93
Swamp Land District No. 41	44		
Swamp Land District No. 45	9 85		
Swamp Land District No. 46	5 24		
Swamp Land District No. 49	18 70		
Swamp Land District No. 51	34 08		
Swamp Land District No. 59	27 29		
Swamp Land District No. 5, S. and I. Fund	8 26		
Estates of Deceased Persons	74,101 17		7,595 65
San Francisco Harbor Improvement Fund	187,002 40		
State Drainage Construction Fund	8,206 86		44 33
Construction Fund Drainage District No. 1	1,637 26		28 26
Consolidated Perpetual Endowment Fund		7,500 00	
Mining Bureau Fund	593 98		
Leprosy Fund	141 00		
Railway Tax Fund	299 32		
Railway Tax Contingent Fund	562 74		
Yosemite Fund	670 40		
Adult Blind Fund	19,561 83		
Revolving Jute Fund			
Fish Commission Fund	2,258 07		
Bank Commissioners' Fund	1,088 24		
State School Book Fund	13,461 49		
San Quentin Prison Fund	35,579 79		
Folsom Prison Fund	6,562 51		
Insurance Commissioner's Special Fund	884 55		
State University Fund	5,581 45		96,867 50
Adult Blind Fund (unavailable)	11,278 62		
State School Land Deposit Fund			
Totals	\$1,546,434 25	\$313,737 72	\$5,672,245 40

during the Fortieth Fiscal Year—by whom paid and into what fund.

Clerk of the Supreme Court.	Commis- sioner of Insurance.	Harbor Commis- sioners.	Secretary of State.	Railroad Companies.	Surveyor- General.	Amounts Carried Forward.
\$8,502 08	\$26,847 30	-----	\$3,342 24	\$125,403 69	\$22,384 00	\$3,521,757 09
-----	-----	-----	-----	79,566 48	-----	2,859,930 96
-----	-----	-----	-----	8,648 53	-----	448,243 64
-----	-----	-----	-----	-----	-----	391,766 59
-----	-----	-----	-----	-----	-----	66,816 82
-----	-----	-----	20,166 95	-----	-----	47,908 41
2,148 02	-----	-----	-----	-----	-----	2,445 43
-----	-----	-----	-----	-----	-----	5,347 71
-----	-----	-----	289 26	-----	-----	1,813 44
-----	-----	-----	-----	-----	-----	142 49
-----	-----	-----	-----	-----	-----	883 30
-----	-----	-----	-----	-----	-----	8 00
-----	-----	-----	-----	-----	-----	1,040 76
-----	-----	-----	-----	-----	-----	44
-----	-----	-----	-----	-----	-----	9 85
-----	-----	-----	-----	-----	-----	5 24
-----	-----	-----	-----	-----	-----	18 70
-----	-----	-----	-----	-----	-----	34 08
-----	-----	-----	-----	-----	-----	27 29
-----	-----	-----	-----	-----	-----	8 26
-----	-----	-----	-----	-----	-----	81,696 82
-----	-----	\$323,384 61	-----	-----	-----	510,387 01
-----	-----	-----	-----	-----	-----	8,251 19
-----	-----	-----	-----	-----	-----	1,665 52
-----	-----	-----	-----	-----	-----	7,500 00
-----	-----	-----	-----	-----	-----	593 98
-----	-----	-----	-----	-----	-----	141 00
-----	-----	-----	-----	370,681 89	-----	370,981 21
-----	-----	-----	-----	65 24	-----	627 98
-----	-----	-----	-----	-----	-----	670 40
-----	-----	-----	-----	-----	-----	19,561 83
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	2,258 07
-----	-----	-----	-----	-----	-----	1,088 24
-----	-----	-----	-----	-----	-----	13,461 49
-----	-----	-----	-----	-----	-----	35,579 79
-----	-----	-----	-----	-----	-----	6,562 51
-----	2,000 00	-----	-----	-----	-----	2,884 55
-----	-----	-----	-----	4,324 26	-----	106,773 21
-----	-----	-----	-----	-----	-----	11,278 62
-----	-----	-----	-----	-----	1,460 00	1,460 00
\$10,740 10	\$28,847 30	\$323,384 61	\$23,798 45	\$588,690 09	\$23,844 00	\$8,531,721 92

SCHEDULE "A"—

FUNDS.	Amounts Brought For- ward.	Register of State Land Office.	Commis- sioners of Yosemite Valley, etc.
General Fund	\$3,521,757 09	\$4,143 00	
School Fund	2,859,930 96		
Interest and Sinking Fund	448,243 64		
State School Land Fund	391,766 59		
University Fund	66,816 82		
Library Fund	47,998 41		
Supreme Court Library Fund	2,445 43		
War Bond Fund	5,347 71		
Election Reward Fund	1,813 44		
Swamp Land District No. 1	142 40		
Swamp Land District No. 2	883 30		
Swamp Land District No. 17	8 00		
Swamp Land District No. 18	1,040 76		
Swamp Land District No. 41	44		
Swamp Land District No. 45	9 85		
Swamp Land District No. 46	5 24		
Swamp Land District No. 49	18 70		
Swamp Land District No. 51	34 08		
Swamp Land District No. 59	27 29		
Swamp Land District No. 5, S. and I. Fund	8 26		
Estates of Deceased Persons	81,696 82		
San Francisco Harbor Improvement Fund	510,387 01		
State Drainage Construction Fund	8,251 19		
Construction Fund Drainage District No. 1	1,665 52		
Consolidated Perpetual Endowment Fund	7,500 00		
Mining Bureau Fund	593 98		
Leprosy Fund	141 00		
Railway Tax Fund	370,981 21		
Railway Tax Contingent Fund	627 98		
Yosemite Fund	670 40		\$5,438 97
Adult Blind Fund	19,561 83		
Revolving Jute Fund			
Fish Commission Fund	2,258 07		
Bank Commissioners' Fund	1,088 24		
State School Book Fund	13,461 49		
San Quentin Prison Fund	35,579 79		
Folsom Prison Fund	6,562 51		
Insurance Commissioner's Special Fund	2,884 55		
State University Fund	106,773 21		
Adult Blind Fund (unavailable)	11,278 62		
State School Land Deposit Fund	1,460 00		
Totals	\$8,531,721 92	\$4,143 00	\$5,438 97

REPORT OF THE STATE TREASURER.

7

Continued.

Trustees of Home for Adult Blind.	Warden of Folsom State Prison.	Warden of San Quentin State Prison.	Superin- tendent of Public In- struction.	License Col- lector of San Fran- cisco.	Trustees Home for Feeble- Minded Children.	Amounts Carried Forward.
					\$2,414 75	\$3,528,314 84
						2,859,930 96
						448,243 64
						391,706 59
						66,816 82
						47,998 41
						2,445 43
						5,347 71
						1,813 44
						142 49
						883 30
						8 00
						1,040 76
						44
						9 85
						5 24
						18 70
						34 08
						27 29
						8 26
						81,696 82
						510,387 01
						8,251 19
						1,665 52
						7,500 00
				\$5,272 15		5,866 13
						141 00
						370,981 21
						627 98
\$2,135 55						6,109 37
		\$102,445 75				21,697 38
						102,445 75
						2,258 07
						1,088 24
			\$130,080 05			143,541 54
		206,859 64				242,439 43
	\$4,797 17					11,359 68
						2,884 55
10,619 52						106,773 21
						21,898 14
						1,460 00
\$12,755 07	\$4,797 17	\$309,305 39	\$130,080 05	\$5,272 15	\$2,414 75	\$9,005,928 47

SCHEDULE "A"—

FUNDS.	Amounts Brought For- ward.	Bank Com- missioners.	Attorney- General.
General Fund	\$3,528,314 84		\$127 45
School Fund	2,859,930 96		
Interest and Sinking Fund	448,243 64		
State School Land Fund	391,766 59		
University Fund	66,816 82		
Library Fund	47,998 41		
Supreme Court Library Fund	2,445 43		
War Bond Fund	5,347 71		
Election Reward Fund	1,813 44		
Swamp Land District No. 1	142 49		
Swamp Land District No. 2	883 30		
Swamp Land District No. 17	8 00		
Swamp Land District No. 18	1,040 76		
Swamp Land District No. 41	44		
Swamp Land District No. 45	9 85		
Swamp Land District No. 46	5 24		
Swamp Land District No. 49	18 70		
Swamp Land District No. 51	34 08		
Swamp Land District No. 59	27 29		
Swamp Land District No. 5, S. and I. Fund	8 26		
Estates of Deceased Persons	81,696 82		
San Francisco Harbor Improvement Fund	510,387 01		
State Drainage Construction Fund	8,251 19		
Construction Fund Drainage District No. 1	1,665 52		
Consolidated Perpetual Endowment Fund	7,500 00		
Mining Bureau Fund	5,866 13		
Leprosy Fund	141 00		
Railway Tax Fund	370,981 21		
Railway Tax Contingent Fund	627 98		
Yosemite Fund	6,109 37		
Adult Blind Fund	21,697 38		
Revolving Jute Fund	102,445 75		
Fish Commission Fund	2,258 07		
Bank Commissioners' Fund	1,088 24	\$15,300 00	
State School Book Fund	143,541 54		
San Quentin Prison Fund	242,439 43		
Folsom Prison Fund	11,359 68		
Insurance Commissioner's Special Fund	2,884 55		
State University Fund	106,773 21		
Adult Blind Fund (unavailable)	21,898 14		
State School Land Deposit Fund	1,460 00		
James Saultry Relief Fund			
Totals	\$9,005,928 47	\$15,300 00	\$127 45

Continued.

State Printer.	State Board of Exam- iners.	State Board of Forestry.	Fish Com- missioners.	Bank of California.	Sheriff of San Fran- cisco.	Amounts Carried Forward.
\$159 44	\$24,500 00	\$25 80	-----	\$8 33	-----	\$3,553,135 86
-----	-----	-----	-----	-----	-----	2,859,950 96
-----	-----	-----	-----	-----	-----	448,243 64
-----	-----	-----	-----	-----	-----	391,766 59
-----	-----	-----	-----	-----	-----	66,816 82
-----	-----	-----	-----	-----	-----	47,998 41
-----	-----	-----	-----	-----	-----	2,445 43
-----	-----	-----	-----	-----	-----	5,347 71
-----	-----	-----	-----	-----	-----	1,813 44
-----	-----	-----	-----	-----	-----	142 49
-----	-----	-----	-----	-----	-----	883 30
-----	-----	-----	-----	-----	-----	8 00
-----	-----	-----	-----	-----	-----	1,040 76
-----	-----	-----	-----	-----	-----	44
-----	-----	-----	-----	-----	-----	9 85
-----	-----	-----	-----	-----	-----	5 24
-----	-----	-----	-----	-----	-----	18 70
-----	-----	-----	-----	-----	-----	34 08
-----	-----	-----	-----	-----	-----	27 29
-----	-----	-----	-----	-----	-----	8 26
-----	-----	-----	-----	-----	\$824 00	82,520 82
-----	-----	-----	-----	-----	-----	510,387 01
-----	-----	-----	-----	-----	-----	8,251 19
-----	-----	-----	-----	-----	-----	1,665 52
-----	-----	-----	-----	-----	-----	7,500 00
-----	-----	-----	-----	-----	-----	5,866 13
-----	-----	-----	-----	-----	-----	141 00
-----	-----	-----	-----	-----	-----	370,981 21
-----	-----	-----	-----	-----	-----	627 98
-----	-----	-----	-----	-----	-----	6,109 37
-----	-----	-----	-----	-----	-----	21,697 38
-----	-----	-----	-----	-----	-----	102,445 75
-----	-----	-----	\$3,391 13	-----	-----	5,640 20
-----	-----	-----	-----	-----	-----	16,388 24
-----	-----	-----	-----	-----	-----	143,541 54
-----	-----	-----	-----	-----	-----	242,430 43
-----	-----	-----	-----	-----	-----	11,359 68
-----	-----	-----	-----	-----	-----	2,884 55
-----	-----	-----	-----	-----	-----	106,773 21
-----	-----	-----	-----	-----	-----	21,898 14
-----	-----	-----	-----	-----	-----	1,460 00
-----	350 50	-----	-----	-----	-----	350 50
\$159 44	\$24,850 50	\$25 80	\$3,391 13	\$8 33	\$824 00	\$9,050,615 12

FUNDS.	Amounts Brought For- ward.	Hon. R. W. Waterman.	Hon. P. Hersey.
General Fund	\$3,553,135 86	\$11,723 64	\$4 00
School Fund	2,859,930 96		
Interest and Sinking Fund	448,243 64		
State School Land Fund	391,766 59		
University Fund	66,816 82		
Library Fund	47,998 41		
Supreme Court Library Fund	2,445 43		
War Bond Fund	5,347 71		
Election Reward Fund	1,813 44		
Swamp Land District No. 1	142 49		
Swamp Land District No. 2	883 30		
Swamp Land District No. 17	8 00		
Swamp Land District No. 18	1,040 76		
Swamp Land District No. 41	44		
Swamp Land District No. 45	9 85		
Swamp Land District No. 46	5 24		
Swamp Land District No. 49	18 70		
Swamp Land District No. 51	34 08		
Swamp Land District No. 59	27 29		
Swamp Land District No. 5, S. and I. Fund	8 26		
Estates of Deceased Persons	82,520 82		
San Francisco Harbor Improvement Fund	510,387 01		
State Drainage Construction Fund	8,251 19		
Construction Fund Drainage District No. 1	1,665 52		
Consolidated Perpetual Endowment Fund	7,500 00		
Mining Bureau Fund	5,866 13		
Leprosy Fund	141 00		
Railway Tax Fund	370,981 21		
Railway Tax Contingent Fund	627 98		
Yosemite Fund	6,109 37		
Adult Blind Fund	21,697 38		
Revolving Jute Fund	102,445 75		
Fish Commission Fund	5,649 20		
Bank Commissioners' Fund	16,388 24		
State School Book Fund	143,541 54		
San Quentin Prison Fund	242,439 43		
Folsom Prison Fund	11,359 68		
Insurance Commissioner's Special Fund	2,884 55		
State University Fund	106,773 21		
Adult Blind Fund (unavailable)	21,898 14		
State School Land Deposit Fund	1,460 00		
James Saultry Relief Fund	350 50		
Totals	\$9,050,615 12	\$11,723 64	\$4 00

Continued.

Sergeant-at-Arms Assembly.	Sergeant-at-Arms Senate.	J. M. Lesser, Attorney at Law.	Secretary Board of Horti- culture.	Regents of State Univer- sity.	H. Swain, Justice of the Peace, Stockton.	Transfer Receipts.	Totals.
\$14 00	\$94 60	-----	\$25 83	-----	-----	-----	\$3,564,997 93
-----	-----	-----	-----	\$24 50	-----	-----	2,859,955 46
-----	-----	-----	-----	-----	-----	-----	448,243 64
-----	-----	-----	-----	-----	-----	-----	391,766 59
-----	-----	-----	-----	-----	-----	-----	66,816 82
-----	-----	-----	-----	-----	-----	-----	47,998 41
-----	-----	-----	-----	-----	-----	-----	2,445 43
-----	-----	-----	-----	-----	-----	-----	5,347 71
-----	-----	-----	-----	-----	-----	-----	1,813 44
-----	-----	-----	-----	-----	-----	-----	142 49
-----	-----	-----	-----	-----	-----	-----	883 30
-----	-----	-----	-----	-----	-----	-----	8 00
-----	-----	-----	-----	-----	-----	-----	1,040 76
-----	-----	-----	-----	-----	-----	-----	44
-----	-----	-----	-----	-----	-----	-----	9 85
-----	-----	-----	-----	-----	-----	-----	5 24
-----	-----	-----	-----	-----	-----	-----	18 70
-----	-----	-----	-----	-----	-----	-----	34 08
-----	-----	-----	-----	-----	-----	-----	27 29
-----	-----	-----	-----	-----	-----	-----	8 26
-----	-----	\$1,588 00	-----	-----	-----	-----	84,108 82
-----	-----	-----	-----	-----	-----	-----	510,387 01
-----	-----	-----	-----	-----	-----	-----	8,251 19
-----	-----	-----	-----	-----	-----	-----	1,665 52
-----	-----	-----	-----	-----	-----	-----	7,500 00
-----	-----	-----	-----	-----	-----	-----	5,866 13
-----	-----	-----	-----	-----	-----	-----	141 00
-----	-----	-----	-----	-----	-----	-----	370,981 21
-----	-----	-----	-----	-----	-----	-----	627 98
-----	-----	-----	-----	-----	-----	-----	6,109 37
-----	-----	-----	-----	-----	-----	\$21,898 14	43,595 52
-----	-----	-----	-----	-----	-----	-----	102,445 75
-----	-----	-----	-----	-----	\$53 10	-----	5,702 30
-----	-----	-----	-----	-----	-----	-----	16,388 24
-----	-----	-----	-----	-----	-----	-----	143,541 54
-----	-----	-----	-----	-----	-----	14,920 00	257,359 43
-----	-----	-----	-----	-----	-----	-----	11,359 68
-----	-----	-----	-----	-----	-----	-----	2,884 55
-----	-----	-----	-----	-----	-----	-----	106,773 21
-----	-----	-----	-----	-----	-----	-----	21,898 14
-----	-----	-----	-----	-----	-----	-----	1,460 00
-----	-----	-----	-----	-----	-----	-----	350 50
\$14 00	\$94 60	\$1,588 00	\$25 83	\$24 50	\$53 10	\$36,818 14	\$9,100,960 93

SCHEDULE "B."—Showing Receipts, Payments, and Trans-

FUNDS.	Balances on Hand July 1, 1888.	Receipts.
General Fund.....	\$499,812 80	\$3,065,185 13
School Fund.....	277,941 95	2,582,013 51
Interest and Sinking Fund.....	243,505 49	204,738 15
State School Land Fund.....	115,970 52	275,796 07
University Fund.....	2,563 57	64,253 25
Library Fund.....	27,831 46	20,166 95
Supreme Court Library Fund.....	297 41	2,148 02
War Bond Fund.....	5,347 71	-----
Election Reward Fund.....	1,524 18	289 26
Swamp Land District No. 1.....	142 49	-----
Swamp Land District No. 2.....	883 30	-----
Swamp Land District No. 17.....	8 00	-----
Swamp Land District No. 18.....	1,029 83	10 93
Swamp Land District No. 41.....	44	-----
Swamp Land District No. 45.....	9 85	-----
Swamp Land District No. 46.....	5 24	-----
Swamp Land District No. 49.....	18 70	-----
Swamp Land District No. 51.....	34 08	-----
Swamp Land District No. 59.....	27 29	-----
Swamp Land District No. 5, Sinking and Interest Fund.....	8 26	-----
Estates of Deceased Persons.....	74,101 17	10,007 65
San Francisco Harbor Improvement Fund.....	187,002 40	323,384 61
State Drainage Construction Fund.....	8,206 86	44 33
Construction Fund Drainage District No. 1.....	1,637 26	28 26
Consolidated Perpetual Endowment Fund.....	-----	7,500 00
Mining Bureau Fund.....	593 98	5,272 15
Leprosy Fund.....	141 00	-----
Railway Tax Fund.....	299 32	370,681 89
Railway Tax Contingent Fund.....	562 74	65 24
Yosemite Fund.....	670 40	5,438 97
Adult Blind Fund.....	19,561 83	2,135 55
Revolving Jute Fund.....	-----	102,445 75
Fish Commission Fund.....	2,258 07	3,444 23
Bank Commissioners' Fund.....	1,088 24	15,300 00
State School Book Fund.....	13,461 49	130,080 05
San Quentin Prison Fund.....	35,579 79	206,859 64
Folsom Prison Fund.....	6,562 51	4,797 17
Insurance Commissioner's Special Fund.....	884 55	2,000 00
State University Fund.....	5,581 45	101,191 76
Adult Blind Fund (unavailable).....	11,278 62	10,619 52
State School Land Deposit Fund.....	-----	1,460 00
James Saultry Relief Fund.....	-----	350 50
Totals.....	\$1,546,434 25	\$7,517,708 54

actions in each Fund during the Fortieth Fiscal Year.

Transfer Receipts.	Totals.	Payments on Warrants.	Transfer Payments.	Total Payments.	Balances on Hand June 30, 1889.
-----	\$3,564,997 93	\$3,060,515 62	-----	\$3,060,515 62	\$504,482 31
-----	2,859,955 46	2,501,108 39	-----	2,501,108 39	358,847 07
-----	448,243 64	212,680 00	-----	212,680 00	235,563 64
-----	391,766 59	139,609 99	-----	139,609 99	252,156 60
-----	66,816 82	64,287 50	-----	64,287 50	2,529 32
-----	47,998 41	13,074 59	-----	13,074 59	34,923 82
-----	2,445 43	2,212 80	-----	2,212 80	232 63
-----	5,347 71	49 34	-----	49 34	5,298 37
-----	1,813 44	300 00	-----	300 00	1,513 44
-----	142 49	-----	-----	-----	142 49
-----	883 30	-----	-----	-----	883 30
-----	8 00	-----	-----	-----	8 00
-----	1,040 76	-----	-----	-----	1,040 76
-----	44	-----	-----	-----	44
-----	9 85	-----	-----	-----	9 85
-----	5 24	-----	-----	-----	5 24
-----	18 70	-----	-----	-----	18 70
-----	34 08	-----	-----	-----	34 08
-----	27 29	-----	-----	-----	27 29
-----	8 26	-----	-----	-----	8 26
-----	84,108 82	1,391 88	-----	1,391 88	82,716 94
-----	510,387 01	257,396 54	-----	257,396 54	252,990 47
-----	8,251 19	-----	-----	-----	8,251 19
-----	1,665 52	1,249 11	-----	1,249 11	416 41
-----	7,500 00	7,500 00	-----	7,500 00	-----
-----	5,866 13	5,619 60	-----	5,619 60	246 53
-----	141 00	-----	-----	-----	141 00
-----	370,981 21	370,811 49	-----	370,811 49	169 72
-----	627 98	-----	-----	-----	627 98
-----	6,109 37	5,627 94	-----	5,627 94	481 43
\$21,898 14	43,595 52	35,405 73	-----	35,405 73	8,189 79
-----	102,445 75	47,525 75	\$14,920 00	62,445 75	40,000 00
-----	5,702 30	4,627 49	-----	4,627 49	1,074 81
-----	16,388 24	14,657 15	-----	14,657 15	1,731 09
-----	143,541 54	64,112 35	-----	64,112 35	79,429 19
14,920 00	257,359 43	88,435 77	-----	88,435 77	168,923 66
-----	11,359 68	-----	-----	-----	11,359 68
-----	2,884 55	1,473 45	-----	1,473 45	1,411 10
-----	106,773 21	98,348 38	-----	98,348 38	8,424 83
-----	21,898 14	-----	21,898 14	21,898 14	-----
-----	1,460 00	-----	-----	-----	1,460 00
-----	350 50	350 50	-----	350 50	-----
\$36,818 14	\$9,100,960 93	\$6,998,871 36	\$36,818 14	\$7,035,189 50	\$2,065,771 43

SCHEDULE "C."—Showing the amounts paid into the State Treasury by County

COUNTIES.	General Fund.	School Fund.	Interest and Sinking Fund.	State University Fund.
Alameda.....	\$174,272 96	\$133,677 48	\$12,005 09	\$5,995 06
Alpine.....	553 82	641 56	38 19	19 09
Amador.....	10,431 13	9,952 44	720 23	359 22
Butte.....	51,234 11	42,509 56	3,533 47	1,766 61
Calaveras.....	14,462 27	10,354 78	719 52	357 45
Colusa.....	64,769 69	49,936 81	4,471 29	2,232 12
Contra Costa.....	38,550 52	30,040 96	2,625 37	1,293 47
Del Norte.....	4,817 61	4,923 61	350 02	160 73
El Dorado.....	8,864 01	12,121 51	611 45	305 61
Fresno.....	87,672 07	72,133 87	6,072 29	3,014 30
Humboldt.....	47,013 21	42,877 64	3,231 11	1,607 34
Inyo.....	3,298 02	4,447 28	232 75	112 13
Kern.....	22,976 34	26,580 60	1,584 56	792 28
Lake.....	9,215 01	9,224 29	642 00	315 56
Lassen.....	7,157 10	10,301 30	492 25	237 24
Los Angeles.....	260,150 72	210,539 01	17,942 95	8,963 82
Marin.....	27,825 97	22,747 03	1,919 03	959 51
Mariposa.....	4,600 33	5,073 68	317 28	158 37
Mendocino.....	30,056 16	33,755 38	2,068 73	1,024 08
Merced.....	36,850 34	30,230 75	2,542 28	1,270 52
Modoc.....	7,748 14	9,860 52	543 31	264 46
Mono.....	2,214 84	3,088 32	152 61	76 24
Monterey.....	36,283 20	33,666 31	2,503 10	1,250 84
Napa.....	36,132 92	31,227 52	2,491 98	1,245 93
Nevada.....	14,961 27	15,535 73	1,025 55	510 04
Placer.....	20,105 79	19,397 72	1,388 84	692 05
Plumas.....	5,479 59	7,360 39	377 88	188 98
Sacramento.....	88,963 89	74,255 79	6,172 11	3,057 34
San Benito.....	15,617 94	14,229 66	1,072 94	534 72
San Bernardino.....	56,628 34	48,345 29	3,912 12	1,949 12
San Diego.....	107,290 07	94,889 78	7,309 75	3,585 89
San Francisco.....	737,864 57	564,946 26	51,732 00	24,967 85
San Joaquin.....	98,774 20	79,310 60	6,810 63	3,396 95
San Luis Obispo.....	37,031 10	35,460 11	2,555 66	1,276 27
San Mateo.....	35,050 74	26,249 48	2,417 68	1,208 53
Santa Barbara.....	51,761 23	40,027 32	3,572 63	1,783 43
Santa Clara.....	141,207 97	108,468 48	9,738 48	4,869 24
Santa Cruz.....	25,821 40	21,833 09	1,781 11	890 30
Shasta.....	12,196 93	12,575 30	846 90	418 86
Sierra.....	4,203 51	5,375 72	290 77	144 69
Siskiyou.....	12,864 75	20,567 67	888 18	443 43
Solano.....	51,368 40	36,634 83	3,538 06	1,766 63
Sonoma.....	78,466 65	60,848 51	5,414 80	2,704 75
Stanislaus.....	38,980 69	31,030 68	2,690 62	1,343 44
Sutter.....	25,195 17	18,194 40	1,738 81	868 44
Tehama.....	28,193 16	26,467 86	1,944 34	972 16
Trinity.....	2,787 48	3,849 67	193 05	95 88
Tulare.....	60,266 14	52,197 08	4,172 00	2,073 36
Tuolumne.....	6,462 16	5,691 08	445 67	222 83
Ventura.....	22,035 88	18,496 98	1,519 72	759 85
Yolo.....	51,399 81	39,973 76	3,539 11	1,765 81
Yuba.....	17,245 66	14,212 61	1,189 35	594 68
Totals.....	\$2,835,374 98	\$2,336,938 06	\$196,089 62	\$96,867 50

Treasurers during the Fortieth Fiscal Year, from July 1, 1888, to June 30, 1889, inclusive.

State School Land Fund.	Estates of Deceased Per- sons Fund.	State Drainage Construction Fund.	Construction Drainage Dis- trict No. 1 Fund.	Swamp Land District No. 18 Fund.	Totals.
	\$21 79				\$325,972 38
\$908 68					2,161 34
1,215 20					22,678 22
2,158 95					101,202 70
2,508 80					29,002 84
5,213 60		\$0 46			126,623 97
18 63		65			72,529 60
4,957 08					15,209 05
2,590 77					28,493 35
12,301 92		4 24			181,198 69
6,156 24		31			100,885 85
1,176 00					9,266 18
19,410 62					71,344 40
2,250 44		14			21,647 44
16,610 86					34,798 75
3,436 15		2 53			501,035 18
					53,451 54
2,953 52	44 94				13,148 12
10,346 05	1,035 30				78,285 70
2,820 94					73,714 83
4,850 19					23,266 62
698 04	1,402 16				7,632 21
2,818 39					76,521 84
689 04					71,787 49
55 87					32,088 46
1,489 60					43,074 00
3,642 08					17,048 92
338 10		25 88	\$27 80		172,841 00
1,331 88					32,787 14
6,872 11		2 15			117,709 13
24,720 82	476 53	56			238,273 40
	4,236 32	4 31			1,388,751 31
1,097 60	378 61				189,768 59
4,576 36		10			80,899 60
411 60					65,338 03
2,672 17		36			99,817 14
945 51					265,229 68
		07			50,325 97
10,951 10		58			36,989 67
764 78					10,779 47
12,230 40					46,994 43
98 00		12			93,406 04
449 87		78			147,885 36
803 60		40			74,849 43
862 40		35	37		46,850 94
5,147 85					62,725 37
1,715 00					8,641 08
6,225 66		34			124,934 58
3,479 00					16,300 74
717 40					43,529 83
				\$10 93	96,689 42
1,607 20					34,849 50
\$199,296 07	\$7,505 65	\$44 33	\$28 26	\$10 93	\$5,672,245 40

SCHEDULE "D."—*Showing the Receipts from*

RAILROAD COMPANIES.

Nevada and California Railroad Company	.....
California Central Railroad Company	.....
California Southern Railroad Company	.....
Northern California Railroad Company	.....
Carson and Colorado Railroad Company	.....
Central Pacific Railroad Company	.....
Southern Pacific Railroad Company	.....
Northern Railway Company	.....
Southern Pacific Branch Railroad Company	.....
California Pacific Railroad Company	.....
South Pacific Coast Railway Company	.....
San Pablo and Tulare Railroad Company	.....
Amador Branch Railroad Company	.....
Stockton and Copperopolis Railroad Company	.....
Pajaro and Santa Cruz Railroad Company	.....
Sacramento and Placerville Railroad Company	.....
Vaca Valley and Clear Lake Railroad Company	.....
San Joaquin and Sierra Nevada Railroad Company	.....
Stockton and Tulare Railroad Company	.....
San Pablo and Tulare Extension Railroad Company	.....
San Francisco and North Pacific Railroad Company	.....
Nevada Narrow Gauge Railroad Company	.....
North Pacific Railroad Company	.....
Pacific Coast Railroad Company	.....
Atlantic and Pacific Railroad Company	.....
Pullman Palace Car Company	.....

Totals

Railroad Companies during the Fortieth Fiscal Year.

General Fund.	School Fund.	Interest and Sinking Fund.	State University Fund.	Railway Tax Fund.	Railway Tax Contingent Fund.	Totals.
\$40 60	\$25 76	\$2 80	\$1 40	\$236 64	-----	\$307 20
3,335 00	2,116 00	230 00	115 00	8,145 51	-----	13,941 51
4,060 00	2,576 00	280 00	140 00	11,775 72	-----	18,831 72
319 00	202 40	22 00	11 00	1,121 53	-----	1,675 93
667 00	423 20	46 00	23 00	4,412 50	-----	5,571 70
43,500 00	27,600 00	3,000 00	1,500 00	142,712 76	-----	218,312 76
40,600 00	25,760 00	2,800 00	1,400 00	116,196 60	-----	186,756 60
6,452 50	4,004 00	445 00	222 50	16,426 09	-----	27,640 09
1,812 50	1,150 00	125 00	62 50	5,184 68	-----	8,334 68
7,250 00	4,600 00	500 00	250 00	21,023 22	-----	33,623 22
3,697 50	2,346 00	255 00	127 50	9,023 86	-----	15,449 86
2,610 00	1,656 00	180 00	90 00	5,758 23	-----	10,294 23
391 50	248 40	27 00	13 50	1,107 10	-----	1,787 50
1,015 00	644 00	70 00	35 00	2,092 57	-----	3,856 57
435 00	276 00	30 00	15 00	1,430 05	-----	2,186 05
870 00	552 00	60 00	30 00	3,127 16	-----	4,639 16
725 00	460 00	50 00	25 00	2,009 47	-----	3,269 47
435 00	276 00	30 00	15 00	1,116 71	-----	1,872 71
432 10	274 16	29 80	14 90	925 84	-----	1,676 80
522 00	331 20	36 00	18 00	1,072 80	-----	1,980 00
3,480 00	2,208 00	240 00	120 00	7,660 24	-----	13,708 24
290 00	184 00	20 00	10 00	1,504 17	-----	2,008 17
1,015 00	644 00	70 00	35 00	2,485 59	-----	4,249 59
1,160 00	736 00	80 00	40 00	3,330 11	-----	5,346 11
246 50	156 40	17 00	8 50	671 56	\$54 99	1,154 95
42 49	26 96	2 93	1 46	131 18	10 25	215 27
\$125,403 69	\$79,566 48	\$8,648 53	\$4,324 26	\$370,681 89	\$65 24	\$588,600 09

SCHEDULE "E."—Showing the Receipts into the State Treasury

FUNDS.	Balances on Hand July 1, 1889.	State Treasurer.	County Treasurers.
General Fund	\$504,482 31		\$4,825,351 12
School Fund	358,847 07	\$216,943 38	2,424,645 61
Interest and Sinking Fund	235,563 64		197,364 40
State School Fund	252,156 60	85,000 00	170,602 68
University Fund	2,529 32	86,458 32	
Library Fund	34,923 82		
Supreme Court Library Fund	232 63		
War Bond Fund	5,298 37		
Election Reward Fund	1,513 44		
Swamp Land District No. 1	142 49		
Swamp Land District No. 2	883 30		
Swamp Land District No. 17	8 00		
Swamp Land District No. 18	1,040 76		103 26
Swamp Land District No. 41	44		
Swamp Land District No. 45	9 85		
Swamp Land District No. 46	5 24		
Swamp Land District No. 49	18 70		
Swamp Land District No. 51	34 08		
Swamp Land District No. 59	27 29		
Swamp Land District No. 5, S. and I. Fund	8 26		
Estates of Deceased Persons	82,716 94		4,936 93
San Francisco Harbor Improvement Fund	252,990 47		
State Drainage Construction Fund	8,251 19		50 35
Construction Fund Drainage District No. 1	416 41		
Consolidated Perpetual Endowment Fund		2,000 00	
Mining Bureau Fund	246 53		
Leprosy Fund	141 00		
Railway Tax Fund	169 72		
Railway Tax Contingent Fund	627 98		
Yosemite Fund	481 43		
Adult Blind Fund	8,189 79		
Revolving Jute Fund	40,000 00		
Fish Commission Fund	1,074 81		
Bank Commissioners' Fund	1,731 09		
State School Book Fund	79,429 19		
San Quentin Prison Fund	168,923 66		
Folsom Prison Fund	11,359 68		
Insurance Commissioner's Special Fund	1,411 10		
State University Fund	8,424 83		98,422 00
State School Land Deposit Fund	1,460 00		
Grammar School Course Fund			71,775 41
Totals	\$2,065,771 43	\$390,401 70	\$7,793,251 76

during the Forty-first Fiscal Year—by whom paid and into what fund.

Railroads.	Clerk of the Supreme Court.	Harbor Com- missioners.	Secretary of State.	Insurance Commis- sioner.	Surveyor- General.	Amounts Carried For- ward.
\$199,212 93	\$9,572 72	-----	\$3,342 20	\$29,628 77	\$7,299 50	\$5,578,889 55
78,154 72	-----	-----	-----	-----	-----	3,078,590 78
8,099 63	-----	-----	-----	-----	-----	441,027 67
-----	-----	-----	-----	-----	-----	507,759 28
-----	-----	-----	-----	-----	-----	88,987 64
-----	-----	-----	19,362 55	-----	-----	54,286 37
-----	2,393 18	-----	-----	-----	-----	2,625 81
-----	-----	-----	-----	-----	-----	5,298 37
-----	-----	-----	315 50	-----	-----	1,828 94
-----	-----	-----	-----	-----	-----	142 49
-----	-----	-----	-----	-----	-----	883 30
-----	-----	-----	-----	-----	-----	8 00
-----	-----	-----	-----	-----	-----	1,144 02
-----	-----	-----	-----	-----	-----	44
-----	-----	-----	-----	-----	-----	9 85
-----	-----	-----	-----	-----	-----	5 24
-----	-----	-----	-----	-----	-----	18 70
-----	-----	-----	-----	-----	-----	34 08
-----	-----	-----	-----	-----	-----	27 29
-----	-----	-----	-----	-----	-----	8 26
-----	-----	-----	-----	-----	-----	87,653 87
-----	-----	\$314,117 17	-----	-----	-----	567,107 64
-----	-----	-----	-----	-----	-----	8,301 54
-----	-----	-----	-----	-----	-----	416 41
-----	-----	-----	-----	-----	-----	2,000 00
-----	-----	-----	-----	-----	-----	246 53
-----	-----	-----	-----	-----	-----	141 00
375,776 39	-----	-----	-----	-----	-----	375,946 11
59 42	-----	-----	-----	-----	-----	687 40
-----	-----	-----	-----	-----	-----	481 43
-----	-----	-----	-----	-----	-----	8,180 79
-----	-----	-----	-----	-----	-----	40,000 00
-----	-----	-----	-----	-----	-----	1,074 81
-----	-----	-----	-----	-----	-----	1,731 09
-----	-----	-----	-----	-----	-----	79,429 19
-----	-----	-----	-----	-----	-----	168,923 66
-----	-----	-----	-----	-----	-----	11,359 68
-----	-----	-----	-----	2,000 00	-----	3,411 10
4,049 50	-----	-----	-----	-----	-----	110,896 33
-----	-----	-----	-----	-----	21,920 00	23,380 00
2,833 18	-----	-----	-----	-----	-----	74,608 50
\$668,185 77	\$11,965 90	\$314,117 17	\$23,020 25	\$31,628 77	\$29,219 50	\$11,327,562 25

SCHEDULE "E"—

FUNDS.	Amounts Brought For- ward.	Register of State Land Office.	Yosemite Commis- sioners.
General Fund	\$5,578,889 55	\$3,698 50	
School Fund	3,078,590 78		
Interest and Sinking Fund	441,027 67		
State School Land Fund	507,759 28		
University Fund	88,987 64		
Library Fund	54,286 37		
Supreme Court Library Fund	2,625 81		
War Bond Fund	5,298 37		
Election Reward Fund	1,828 94		
Swamp Land District No. 1	142 49		
Swamp Land District No. 2	883 30		
Swamp Land District No. 17	8 00		
Swamp Land District No. 18	1,144 02		
Swamp Land District No. 41	44		
Swamp Land District No. 45	9 85		
Swamp Land District No. 46	5 24		
Swamp Land District No. 49	18 70		
Swamp Land District No. 51	34 08		
Swamp Land District No. 59	27 29		
Swamp Land District No. 5, S. and I. Fund	8 26		
Estates of Deceased Persons	87,653 87		
San Francisco Harbor Improvement Fund	567,107 64		
State Drainage Construction Fund	8,301 54		
Construction Fund Drainage District No. 1	416 41		
Consolidated Perpetual Endowment Fund	2,000 00		
Mining Bureau Fund	246 53		
Leprosy Fund	141 00		
Railway Tax Fund	375,946 11		
Railway Tax Contingent Fund	687 40		
Yosemite Fund	481 43		\$4,145 20
Adult Blind Fund	8,189 79		
Revolving Jute Fund	40,000 00		
Fish Commission Fund	1,074 81		
Bank Commissioners' Fund	1,731 09		
State School Book Fund	79,429 19		
San Quentin Prison Fund	168,923 66		
Folsom Prison Fund	11,359 68		
Insurance Commissioner's Special Fund	3,411 10		
State University Fund	110,896 33		
State School Land Deposit Fund	23,380 00		
Grammar School Course Fund	74,608 59		
Fish Commis'sers' Fund (purchase of boats)			
Totals	\$11,327,562 25	\$3,698 50	\$4,145 20

Continued.

Trustees of Home for Adult Blind.	License Col- lector of San Francisco.	Trustees Home for Feeble-Mind- ed Children.	Bank Com- missioners.	Attorney- General.	Fish Com- missioners.	Amounts Car- ried Forward.
		\$2,663 55		\$95 50		\$5,585,347 10
						3,078,590 78
						441,027 67
						507,759 28
						88,987 64
						54,286 37
						2,625 81
						5,298 37
						1,828 94
						142 49
						883 30
						8 00
						1,144 02
						44
						9 85
						5 24
						18 70
						34 08
						27 29
						8 26
						87,653 87
						567,107 64
						8,301 54
						416 41
						2,000 00
	\$6,051 55					6,298 08
				3,985 34		4,126 34
						375,946 11
						687 40
						4,626 63
\$16,808 55						24,998 34
						40,000 00
					\$5,249 84	6,324 65
			\$15,300 00			17,031 09
						79,429 19
						168,923 66
						11,359 68
						3,411 10
						110,896 33
						23,380 00
						74,608 59
					1,100 00	1,100 00
\$16,808 55	\$6,051 55	\$2,663 55	\$15,300 00	\$4,080 84	\$6,349 84	\$11,386,660 28

SCHEDULE "E"—

FUNDS.	Amounts Brought For- ward.	Warden San Quentin Prison.	Warden Fol- som Prison.
General Fund.....	\$5,585,347 10	-----	-----
School Fund.....	3,078,590 78	-----	-----
Interest and Sinking Fund.....	441,027 67	-----	-----
State School Land Fund.....	507,759 28	-----	-----
University Fund.....	88,987 64	-----	-----
Library Fund.....	54,286 37	-----	-----
Supreme Court Library Fund.....	2,625 81	-----	-----
War Bond Fund.....	5,298 37	-----	-----
Election Reward Fund.....	1,828 94	-----	-----
Swamp Land District No. 1.....	142 49	-----	-----
Swamp Land District No. 2.....	883 30	-----	-----
Swamp Land District No. 17.....	8 00	-----	-----
Swamp Land District No. 18.....	1,144 02	-----	-----
Swamp Land District No. 41.....	44	-----	-----
Swamp Land District No. 45.....	9 85	-----	-----
Swamp Land District No. 46.....	5 24	-----	-----
Swamp Land District No. 49.....	18 70	-----	-----
Swamp Land District No. 51.....	34 08	-----	-----
Swamp Land District No. 59.....	27 29	-----	-----
Swamp Land District No. 5, S. and I. Fund.....	8 26	-----	-----
Estates of Deceased Persons.....	87,653 87	-----	-----
San Francisco Harbor Improvement Fund.....	567,107 64	-----	-----
State Drainage Construction Fund.....	8,301 54	-----	-----
Construction Fund Drainage District No. 1.....	416 41	-----	-----
Consolidated Perpetual Endowment Fund.....	2,000 00	-----	-----
Mining Bureau Fund.....	6,298 08	-----	-----
Leprosy Fund.....	4,126 34	-----	-----
Railway Tax Fund.....	375,946 11	-----	-----
Railway Tax Contingent Fund.....	687 40	-----	-----
Yosemite Fund.....	4,626 63	-----	-----
Adult Blind Fund.....	24,998 34	-----	-----
Revolving Jute Fund.....	40,000 00	\$150,064 89	-----
Fish Commission Fund.....	6,324 65	-----	-----
Bank Commissioners' Fund.....	17,031 09	-----	-----
State School Book Fund.....	79,429 19	-----	-----
San Quentin Prison Fund.....	168,923 66	54,763 12	-----
Folsom Prison Fund.....	11,359 68	-----	\$1,333 65
Insurance Commissioner's Special Fund.....	3,411 10	-----	-----
State University Fund.....	110,896 33	-----	-----
State School Land Deposit Fund.....	23,880 00	-----	-----
Grammar School Course Fund.....	74,608 59	-----	-----
Fish Commissioners' Fund (purchase of boats).....	1,100 00	-----	-----
Totals	\$11,386,660 28	\$204,818 01	\$1,333 65

Continued.

Superintendent of Public Instruction.	Superintendent of State Printing.	Sheriff of Solano Co.	Controller of State.	Sheriff of Merced Co.	Trustees of State Library.	Amounts Carried Forward.
-----	\$349 43	-----	\$255 00	-----	\$10 09	\$5,585,961 62
-----	-----	-----	-----	-----	-----	3,078,590 78
-----	-----	-----	-----	-----	-----	441,027 67
-----	-----	-----	-----	-----	-----	507,759 28
-----	-----	-----	-----	-----	-----	88,987 64
-----	-----	-----	-----	-----	-----	54,286 37
-----	-----	-----	-----	-----	-----	2,625 81
-----	-----	-----	-----	-----	-----	5,298 37
-----	-----	-----	-----	-----	-----	1,828 94
-----	-----	-----	-----	-----	-----	142 49
-----	-----	-----	-----	-----	-----	883 30
-----	-----	-----	-----	-----	-----	8 00
-----	-----	-----	-----	-----	-----	1,144 02
-----	-----	-----	-----	-----	-----	44
-----	-----	-----	-----	-----	-----	9 85
-----	-----	-----	-----	-----	-----	5 24
-----	-----	-----	-----	-----	-----	18 70
-----	-----	-----	-----	-----	-----	34 08
-----	-----	-----	-----	-----	-----	27 29
-----	-----	-----	-----	-----	-----	8 26
-----	-----	-----	-----	\$71 90	-----	87,725 77
-----	-----	-----	-----	-----	-----	567,107 64
-----	-----	-----	-----	-----	-----	8,301 54
-----	-----	-----	-----	-----	-----	416 41
-----	-----	-----	-----	-----	-----	2,000 00
-----	-----	-----	-----	-----	-----	6,298 08
-----	-----	-----	-----	-----	-----	4,126 34
-----	-----	-----	-----	-----	-----	375,946 11
-----	-----	-----	-----	-----	-----	687 40
-----	-----	-----	-----	-----	-----	4,626 63
-----	-----	-----	-----	-----	-----	24,998 34
-----	-----	-----	-----	-----	-----	190,054 89
-----	-----	\$26 00	-----	-----	-----	6,350 65
-----	-----	-----	-----	-----	-----	17,031 09
\$60,165 18	-----	-----	-----	-----	-----	139,594 37
-----	-----	-----	-----	-----	-----	223,686 78
-----	-----	-----	-----	-----	-----	12,693 33
-----	-----	-----	-----	-----	-----	3,411 10
-----	-----	-----	-----	-----	-----	110,896 33
-----	-----	-----	-----	-----	-----	23,380 00
-----	-----	-----	-----	-----	-----	74,608 59
-----	-----	-----	-----	-----	-----	1,100 00
\$60,165 18	\$349 43	\$26 00	\$255 00	\$71 90	\$10 09	\$11,653,689 54

FUNDS.

General Fund	
School Fund	
Interest and Sinking Fund	
State School Land Fund	
University Fund	
Library Fund	
Supreme Court Library Fund	
War Bond Fund	
Election Reward Fund	
Swamp Land District No. 1	
Swamp Land District No. 2	
Swamp Land District No. 17	
Swamp Land District No. 18	
Swamp Land District No. 41	
Swamp Land District No. 45	
Swamp Land District No. 46	
Swamp Land District No. 49	
Swamp Land District No. 51	
Swamp Land District No. 59	
Swamp Land District No. 5, S. and I. Fund	
Estates of Deceased Persons	
San Francisco Harbor Improvement Fund	
State Drainage Construction Fund	
Construction Fund Drainage District No. 1	
Consolidated Perpetual Endowment Fund	
Mining Bureau Fund	
Leprosy Fund	
Railway Tax Fund	
Railway Tax Contingent Fund	
Yosemite Fund	
Adult Blind Fund	
Revolving Jute Fund	
Fish Commission Fund	
Bank Commissioners' Fund	
State School Book Fund	
San Quentin Prison Fund	
Folsom Prison Fund	
Insurance Commissioner's Special Fund	
State University Fund	
State School Land Deposit Fund	
Grammar School Course Fund	
Fish Commissioners' Fund (purchase of boats)	
Southern California Insane Hospital Fund	
Totals	

Continued.

Amounts Brought For- ward.	M. E. San- born, Attor- ney at Law.	J. D. Inger- soll, J. P. at Rio Vista.	Jas. W. Bart- lett, Attor- ney at Law.	M. D. Boruck, Private Sec- retary to Governor.	Transfer Payments.	Totals.
\$5,585,961 62				\$5 30		\$5,585,966 92
3,078,590 78						3,078,590 78
441,027 67						441,027 67
507,759 28						507,759 28
88,987 64						88,987 64
54,286 37						54,286 37
2,625 81						2,625 81
5,298 37						5,298 37
1,828 94						1,828 94
142 49						142 49
883 30						883 30
8 00						8 00
1,144 02						1,144 02
44						44
9 85						9 85
5 24						5 24
18 70						18 70
34 08						34 08
27 29						27 29
8 26						8 26
87,725 77	\$152 95		\$1,553 93			89,432 65
567,107 64						567,107 64
8,301 54						8,301 54
416 41						416 41
2,000 00						2,000 00
6,298 08						6,298 08
4,126 34						4,126 34
375,946 11						375,946 11
687 40						687 40
4,626 63						4,626 63
24,998 34						24,998 34
190,054 89					\$60,000 00	250,054 89
6,350 65		\$33 33				6,383 98
17,031 09						17,031 09
139,594 37						139,594 37
223,686 78						223,686 78
12,693 33						12,693 33
3,411 10						3,411 10
110,896 33						110,896 33
23,380 00						23,380 00
74,608 59						74,608 59
1,100 00						1,100 00
					350,000 00	350,000 00
\$11,653,689 54	\$152 95	\$33 33	\$1,553 93	\$5 30	\$410,000 00	\$12,065,435 05

REPORT OF THE STATE TREASURER.

SCHEDULE "F."

Showing Receipts, Payments, and Transactions in each Fund during the Forty-first Fiscal Year.

[illegible]

Fish Commission Fund.....	1,074 81	5,369 17	-----	6,383 98	6,305 99	-----	6,305 99	77 99
Bank Commissioners' Fund.....	1,731 09	15,300 00	-----	17,031 09	15,766 74	-----	15,766 74	1,264 35
State School Book Fund.....	79,429 19	60,165 18	-----	139,594 37	67,797 56	-----	67,797 56	71,796 81
San Quentin Prison Fund.....	168,323 66	54,763 12	-----	223,086 78	111,932 19	-----	111,932 19	111,754 59
Folsom Prison Fund.....	11,359 68	1,333 65	-----	12,693 33	-----	-----	-----	12,693 33
Insurance Commis'er's Spec'l F'd.....	1,411 10	2,000 00	-----	3,411 10	1,372 35	-----	1,372 35	2,038 75
State University Fund.....	8,424 83	102,471 50	-----	110,896 33	101,205 89	-----	101,205 89	9,690 44
State School Land Deposit Fund.....	1,460 00	21,920 00	-----	23,380 00	3,620 00	-----	3,620 00	19,760 00
Grammar School Course Fund.....	-----	74,608 59	-----	74,608 59	5,751 00	-----	5,751 00	68,857 59
Fish Commissioners' Fund (purchase of boats).....	-----	1,100 00	-----	1,100 00	-----	-----	-----	1,100 00
Southern California Insane Hospital Fund.....	-----	-----	350,000 00	350,000 00	115,000 00	-----	115,000 00	235,000 00
Totals.....	\$2,065,771 43	\$9,589,633 62	\$410,000 00	\$12,065,435 05	\$8,090,175 69	\$410,000 00	\$8,500,175 69	\$3,565,259 36

SCHEDULE "G."—Showing the amounts paid into the State Treasury by County

COUNTIES.	General Fund.	School Fund.	Interest and Sinking Fund.	State University Fund.
Alameda	\$322,138 81	\$152,460 65	\$13,160 02	\$6,559 47
Alpine	754 86	606 33	33 99	16 83
Amador	18,896 48	11,186 88	787 55	393 42
Butte	89,946 09	45,854 50	3,656 69	1,828 34
Calaveras	22,425 00	10,956 72	746 65	372 11
Colusa	109,536 37	49,368 60	4,458 26	2,225 63
Contra Costa	64,573 02	32,541 58	2,743 90	1,370 64
Del Norte	8,202 26	5,212 18	333 43	166 71
El Dorado	15,214 93	10,633 60	619 44	309 63
Fresno	151,129 03	77,010 52	6,188 87	3,070 08
Humboldt	82,247 25	43,750 33	3,383 53	1,688 67
Inyo	5,116 87	4,191 29	213 00	106 49
Kern	44,896 46	29,190 45	1,826 78	913 19
Lake	17,407 10	10,346 58	710 64	353 58
Lassen	10,253 11	9,238 35	417 16	208 57
Los Angeles	371,577 55	191,145 01	15,161 57	7,576 00
Marin	46,536 26	23,229 26	1,891 72	945 86
Mariposa	7,415 39	4,423 44	303 49	151 58
Mendocino	49,382 02	29,699 50	2,009 92	1,003 70
Merced	60,852 42	29,866 13	2,475 05	1,236 64
Modoc	12,253 36	9,018 24	500 61	249 99
Mono	3,594 32	2,343 96	146 12	73 06
Monterey	62,577 43	32,873 47	2,546 18	1,272 09
Napa	62,303 28	32,285 70	2,534 12	1,266 29
Nevada	25,411 49	14,706 18	1,049 06	524 41
Placer	35,967 71	21,278 39	1,462 60	731 20
Plumas	9,563 88	6,342 61	383 28	191 62
Sacramento	153,916 23	80,193 40	6,259 59	3,127 98
San Benito	26,874 76	14,295 03	1,098 67	549 31
San Bernardino	88,260 30	48,698 28	3,597 45	1,793 71
San Diego	124,761 17	66,838 64	5,103 60	2,544 03
San Francisco	1,329,597 06	628,731 76	54,859 56	27,269 60
San Joaquin	167,083 71	81,677 15	6,809 67	3,404 84
San Luis Obispo	61,764 82	29,667 26	2,514 09	1,257 05
San Mateo	61,203 85	28,555 18	2,487 96	1,243 97
Santa Barbara	68,946 99	34,074 39	2,805 32	1,402 13
Santa Clara	241,547 53	113,291 60	9,819 01	4,909 49
Santa Cruz	47,369 61	27,860 87	1,941 66	968 65
Shasta	22,503 52	15,251 69	923 66	456 50
Sierra	6,668 75	5,479 92	272 52	135 57
Siskiyou	23,686 91	14,584 54	963 74	481 87
Solano	83,896 53	42,581 99	3,419 39	1,709 47
Sonoma	137,233 78	69,779 26	5,579 15	2,789 25
Stanislaus	70,010 45	32,525 68	2,847 64	1,422 90
Sutter	44,323 19	22,178 10	1,804 23	902 12
Tehama	48,937 90	25,042 33	1,989 56	994 78
Trinity	5,281 21	3,172 50	218 00	108 96
Tulare	101,212 73	53,005 87	4,126 71	2,056 25
Tuolumne	11,092 51	5,841 81	461 07	230 52
Ventura	35,627 42	18,716 30	1,463 71	731 74
Yolo	89,053 43	43,195 26	3,621 88	1,809 87
Yuba	29,686 55	14,715 86	1,216 77	607 56
Orange	34,837 46	14,930 49	1,416 16	708 08
Totals	\$4,825,351 12	\$2,424,645 61	\$197,364 40	\$98,422 00

Treasurers during the Forty-first Fiscal Year, from July 1, 1889, to June 30, 1890, inclusive.

State School Land Fund.	Grammar School Course Fund.	State Drainage Construction Fund.	Estates of Deceased Persons Fund.	Swamp Land District No. 18 Fund.	Totals.
\$940 80	\$4,781 13	\$33 18			\$500,074 06
19 00	10 53				1,442 14
2,430 40	285 41				33,980 14
3,694 60	1,373 60				146,353 82
642 88	284 07				35,427 43
1,169 59	1,633 24	54			168,392 23
	826 59		\$1,697 69		103,753 42
1,685 60	131 01				15,731 19
3,474 13	243 87				30,495 60
16,180 16	2,291 50	1 78			255,871 94
2,924 21	1,236 42	09			135,230 50
1,097 60	79 21		1,542 16		12,346 62
13,612 20	691 25		343 04		91,473 37
1,122 71	273 26	57			30,214 44
15,066 86	163 07				35,347 12
2,262 97	5,594 42	82			593,318 34
	712 72				73,315 82
4,518 50	117 11				16,929 51
2,272 30	709 27	20			85,076 91
2,350 57	933 29				97,714 10
8,892 16	192 79				31,107 15
392 00	58 03				6,607 49
4,291 47	969 84				104,530 48
297 57	954 37	06			99,641 39
861 42	378 05				42,930 61
1,674 60	555 84		696 72		62,367 06
9,875 82	147 00				26,304 21
	2,304 89				245,802 09
786 21	415 10				44,019 08
5,164 57	1,343 71	1 90			148,859 92
7,129 71	1,866 66	53			208,244 34
	18,987 03	6 73	577 87		2,060,029 61
	2,532 13				261,507 50
5,802 82	951 06				101,957 10
421 29	940 09				94,852 34
1,417 63	1,055 89		79 45		109,781 80
1,181 19	3,586 46				374,335 28
392 00	722 55	98			79,256 32
10,848 60	350 64	56			50,335 17
843 55	105 28				13,505 59
11,221 52	377 43				51,316 01
6 53	1,371 58				132,985 49
1,343 66	2,064 79	55			218,790 44
705 60	1,072 71				108,584 98
	683 55				69,891 19
6,702 04	753 26				84,419 87
2,724 40	52 21				11,557 28
6,281 80	1,542 33	1 86			168,227 55
2,278 42	170 18				20,074 51
2,248 02	542 73				59,329 92
735 00	1,360 43			\$103 26	139,879 13
617 40	455 79				47,299 93
	540 04				52,432 23
\$170,602 68	\$71,775 41	\$50 35	\$4,936 93	\$103 26	\$7,793,251 76

SCHEDULE "H."

Showing the Receipts from Railroad Companies during the Forty-first Fiscal Year.

RAILROAD COMPANIES.	General Fund.	School Fund.	Interest and Sinking Fund.	State University Fund.	Grammar School Course Fund.	Railway Tax Fund.	Railway Tax Contingent Fund.	Totals.
Atlantic and Pacific Railroad Co.	\$418 20	\$164 05	\$17 00	\$8 50	\$5 95	\$692 52	-----	\$1,306 22
Carson and Colorado Railroad Co.	1,131 60	443 90	46 00	23 00	16 10	4,267 68	-----	5,928 28
North Pacific Coast Railway Co.	1,795 80	704 45	73 00	36 50	25 55	2,510 67	-----	5,145 97
Nevada County Narrow Gauge Railroad Co.	492 00	193 00	20 00	10 00	7 00	1,644 43	-----	2,306 43
Nevada and California Railroad Co.	413 28	162 12	16 80	8 40	5 88	1,048 39	-----	1,654 87
California Southern Railroad Co.	5,412 00	2,123 00	220 00	110 00	77 00	11,879 07	-----	19,821 07
Pacific Coast Railway Co.	2,017 20	791 30	82 00	41 00	28 70	3,283 80	-----	6,244 00
Central Pacific Railroad Co.	63,960 00	25,030 00	2,600 00	1,300 00	910 00	128,541 35	-----	222,401 35
Southern Pacific Railroad Co.	73,800 00	28,950 00	3,000 00	1,500 00	1,050 00	136,580 16	-----	244,880 16
Northern Railway Co.	17,220 00	6,755 00	700 00	350 00	245 00	28,810 56	-----	54,080 56
California Pacific Railroad Co.	12,300 00	4,825 00	500 00	250 00	175 00	20,944 14	-----	38,464 14
South Pacific Coast Railroad Co.	6,273 00	2,460 75	255 00	127 50	89 25	10,408 40	-----	19,613 90
Northern California Railroad Co.	615 00	241 25	25 00	12 50	8 75	1,286 54	-----	2,189 04
California Central Railroad Co.	7,380 00	2,895 00	300 00	150 00	105 00	15,150 36	-----	25,980 36
San Francisco and North Pacific Co.	5,904 00	2,316 00	240 00	120 00	84 00	8,511 02	-----	17,175 02
Pullman Palace Car Company	80 85	39 90	4 83	2 10	-----	217 30	\$59 42	404 40
Totals	\$199,212 93	\$78,154 72	\$8,090 63	\$4,049 50	\$2,833 18	\$375,776 39	\$59 42	\$668,185 77

SCHEDULE "I."
List of Warrants Canceled during the Forty-first Fiscal Year.

Date of Issue.	No.	To WHOM ISSUED.	Fund.	Amount.	When Canceled.
September 1, 1880.	1107	J. G. Davis	State Drainage Construction	\$23 55	August 26, 1889.
September 13, 1880	2229	Jas. Haggerty	State Drainage Construction	16 50	August 26, 1889.
December 2, 1880	2655	Poultrey Steamer "Governor Dana"	State Drainage Construction	10 00	August 26, 1889.
December 6, 1880	2753	E. Deane & Co.	State Drainage Construction	20 00	August 26, 1889.
December 7, 1880	2812	E. D. Hayes	Construction Fund District No. 1	9 12	August 26, 1889.
December 8, 1880	2845	J. Haggerty	Construction Fund District No. 1	6 35	August 26, 1889.
December 8, 1880	2846	R. McLean	Construction Fund District No. 1	6 00	August 26, 1889.
December 21, 1880	3086	S. E. Dickens	Construction Fund District No. 1	5 33	August 26, 1889.
December 10, 1885	4006	J. W. McCarthy	General	17 35	August 26, 1889.
December 21, 1885	4325	J. W. McComb, Warden, Folsom.	General	53 25	August 26, 1889.
January 27, 1887	9009	H. Vrooman	General	14 55	August 26, 1889.
May 28, 1887	13251	Directors Home for Adult Blind	Adult Blind	130 00	August 26, 1889.
June 14, 1887	15886	Treasurer State Board of Viticulture	General	1 50	August 26, 1889.
July 21, 1887	555	Wm. Griffin	Construction Fund District No. 1	48 00	August 26, 1889.
July 21, 1887	556	J. Holbrook	Construction Fund District No. 1	48 00	August 26, 1889.
July 21, 1887	561	W. S. Dunleavy	Construction Fund District No. 1	8 00	August 26, 1889.
July 21, 1887	562	E. H. Coffery	Construction Fund District No. 1	8 00	August 26, 1889.
July 21, 1887	563	W. Johnston	Construction Fund District No. 1	8 00	August 26, 1889.
July 21, 1887	564	James Banks	Construction Fund District No. 1	9 00	August 26, 1889.
July 21, 1887	565	Wm. Jackson	Construction Fund District No. 1	34 66	August 26, 1889.
July 21, 1887	576	J. H. Pryor	Construction Fund District No. 1	5 00	August 26, 1889.
July 21, 1887	590	E. A. Foye	Construction Fund District No. 1	23 33	August 26, 1889.
July 21, 1887	594	J. Hawkins.	Construction Fund District No. 1	6 66	August 26, 1889.
July 21, 1887	595	C. F. Koch	Construction Fund District No. 1	5 33	August 26, 1889.
July 21, 1887	596	Peter Foley	Construction Fund District No. 1	14 06	August 26, 1889.
July 21, 1887	607	Wm. Reynolds	Construction Fund District No. 1	15 50	August 26, 1889.
July 21, 1887	608	Hales & Murphy	Construction Fund District No. 1	38 26	August 26, 1889.
July 21, 1887	612	Thomas Murphy	Construction Fund District No. 1	65 71	August 26, 1889.
July 22, 1887	620	J. Hall	Construction Fund District No. 1	9 31	August 26, 1889.
July 22, 1887	623	H. D. Abbott	General	50 00	August 26, 1889.
July 22, 1887	638	J. B. McDonald	General	4 50	August 26, 1889.
July 22, 1887	643	R. H. Goodwin.	General	53 83	August 26, 1889.
July 22, 1887	644	H. Bordwell	General	17 28	August 26, 1889.
July 22, 1887	645	E. J. Leak	General	9 24	August 26, 1889.
July 22, 1887	646	Peter Johnson	General	9 24	August 26, 1889.
July 22, 1887	630	W. D. Henth	General	40 00	August 26, 1889.
September 1, 1887	2805	Geo. F. Brunner	General	25	August 26, 1889.
October 3, 1887	4267	Treasurer State Board of Horticulture	General	8 00	August 26, 1889.
November 23, 1887	6052	Trustees Home for Feeble-Minded Children	General	14 65	August 26, 1889.
June 20, 1889	18141	J. E. T. Smith	General	41 25	July 11, 1889.
		Total		\$909 16	

SCHEDULE "J."

Showing State Debt and Kinds of Money in the Treasury June 30, 1890.

KIND OF DEBT.	Amount.	
Outstanding 7 per cent Civil Bonds of 1857, issued under Act of April 28, 1857.....	\$4,500 00	
Outstanding 7 per cent Civil Bonds of 1860, issued under Act of April 30, 1860.....	500 00	
Outstanding 6 per cent Funded Debt Bonds of 1873, issued under Act of April 2, 1873.....	2,637,000 00	
Total funded indebtedness.....		\$2,642,000 00
Outstanding Controller's warrants on General Fund.....	106,585 12	
Outstanding Controller's warrants on School Fund.....	47,838 31	
Outstanding Controller's warrants on State School Land Fund.....	93 90	
Outstanding Controller's warrants on Railway Tax Fund.....	8,916 19	
Outstanding Controller's warrants on Adult Blind Fund.....	4,356 46	
Outstanding Controller's warrants on Fish Commission Fund.....	33 10	
Outstanding Controller's warrants on Bank Commissioners' Fund.....	1,125 00	
Outstanding Controller's warrants on School Land Deposit Fund.....	320 00	
Outstanding Controller's warrants on Consolidated Perpetual Endowment Fund.....	2,000 00	
Outstanding Controller's warrants on State School Book Fund.....	1,196 02	
Outstanding Controller's warrants on Grammar School Course Fund.....	831 00	
Total floating indebtedness.....		173,295 10
<i>Cash on Hand.</i>		
Gold coin.....	\$3,416,540 00	
Silver coin.....	2,012 92	
United States legal tender notes.....	16,580 00	
January receipts.....	53,752 77	
Totals.....	\$3,488,885 69	\$2,815,295 10

SCHEDULE "K."

Showing Interest and Coupon Account during the Fortieth and Forty-first Fiscal Years.

BONDS.	Balance on Hand June 30, 1888.	Receipts.	Payments.	Balance on Hand.
<i>Pacific Railroad Bonds, 1864.</i>				
Coupon No. 23 -----	\$70 00	-----	-----	\$70 00
Coupon No. 25 -----	35 00	-----	-----	35 00
Coupon No. 27 -----	385 00	-----	-----	385 00
Coupon No. 31 -----	35 00	-----	-----	35 00
Coupon No. 32 -----	70 00	-----	-----	70 00
Coupon No. 36 -----	35 00	-----	-----	35 00
Coupon No. 37 -----	490 00	-----	-----	490 00
Coupon No. 38 -----	35 00	-----	\$35 00	-----
Coupon No. 39 -----	70 00	-----	35 00	35 00
Coupon No. 40 -----	35 00	-----	35 00	-----
<i>Funded Debt Bonds, 1873.</i>				
1873. Coupon No. 30 -----	300 00	-----	300 00	-----
1873. Coupon No. 31 -----	-----	\$80,940 00	80,940 00	-----
1873. Coupon No. 32 -----	-----	79,740 00	79,710 00	30 00
1873. Coupon No. 33 -----	-----	79,140 00	79,105 00	35 00
1873. Coupon No. 34 -----	-----	79,110 00	79,005 00	105 00
1873. Coupon No. 35 -----	-----	79,110 00	70,770 00	8,340 00
Totals -----	\$1,560 00	\$398,040 00	\$389,935 00	\$9,665 00

SCHEDULE "L."

Showing Bonds held in Trust by State Treasurer.

CLASS OF BONDS.	Amount.	Total.
<i>For Benefit of State School Fund.</i>		
State—		
State Funded Debt Bonds of 1873, 6 per cent.....	\$1,541,500 00	\$1,541,500 00
County—		
Sacramento County Bonds, $4\frac{1}{2}$ per cent	\$100,000 00	
Sacramento County Bonds, 6 per cent	32,100 00	
Sacramento County Bonds, 8 per cent	145,000 00	
Sacramento County Bonds, 4 per cent	84,000 00	
Humboldt County Bonds, 9 per cent	25,000 00	
Santa Clara County Bonds, 4 per cent	86,000 00	
Santa Clara County Bonds, 5 per cent	12,500 00	
Fresno County Bonds, 6 per cent	51,000 00	
Marin County Bonds, 5 per cent	72,000 00	
Inyo County Bonds, 5 per cent	50,500 00	
Yolo County Bonds, 5 per cent	43,000 00	
Tehama County Bonds, 5 per cent	51,000 00	
Napa County Bonds, 5 per cent	27,000 00	
San Luis Obispo County Bonds, 5 per cent	16,000 00	
San Luis Obispo County Bonds, 8 per cent	40,000 00	
Mendocino County Bonds, 4 per cent	68,000 00	
Santa Barbara County Bonds, 5 per cent	12,000 00	
Los Angeles County Bonds, $4\frac{1}{2}$ per cent	255,000 00	
Lake County Bonds, 5 per cent	47,800 00	
San Diego County Bonds, 5 per cent	191,800 00	
San Diego County Bonds, $4\frac{1}{2}$ per cent	34,000 00	
Monterey County Bonds, 5 per cent	90,000 00	
Santa Cruz County Bonds, $4\frac{1}{2}$ per cent	149,000 00	
Trinity County Bonds, 5 per cent	7,150 00	
Merced County Bonds, $4\frac{1}{2}$ per cent	37,000 00	1,726,850 00
Total		\$3,268,350 00
<i>For Benefit of State University.</i>		
State—		
State Funded Debt Bonds of 1873, 6 per cent.....	\$817,500 00	\$817,500 00
County—		
Tehama, 5 per cent	\$29,500 00	
San Francisco Park Improvement, 6 per cent	51,000 00	
San Francisco, School, 6 per cent	30,000 00	
San Francisco, Montgomery Avenue, 6 per cent	22,000 00	
Plumas, 6 per cent	7,000 00	
Marin, 7 per cent	50,000 00	
Kern, 7 per cent	15,000 00	
Santa Clara, 7 per cent	3,000 00	
Fresno, 7 per cent	12,500 00	220,000 00
Town—		
Town of Alameda, 6 per cent	\$6,000 00	6,000 00
Total		\$1,043,500 00
<i>For Benefit of Widow and Minor Heirs of Jas. Sandtry, Deceased.</i>		
County—		
Inyo, 5 per cent	\$20,000 00	\$20,000 00

SCHEDULE "M."

Showing Transactions in State Bonds during the Fortieth and Forty-first Fiscal Years.

SERIES.	Amount.	Amount.
<i>Funded Debt of 1857, seven per cent bonds.</i>		
Outstanding July 1, 1888.....	\$5,000 00	
Paid during the forty-first fiscal year.....	500 00	
Outstanding June 30, 1890.....		\$4,500 00
<i>Funded Debt of 1860, seven per cent bonds.</i>		
Outstanding July 1, 1888.....	\$500 00	
Outstanding June 30, 1890.....		500 00
<i>Funded Debt of 1873, six per cent bonds.</i>		
Outstanding July 1, 1888.....	\$2,698,000 00	
Paid during the fortieth and forty-first fiscal years.....	61,000 00	
Outstanding June 30, 1890.....		2,637,000 00
Total bonds outstanding.....		\$2,642,000 00

REMARKS.—Interest ceased on the outstanding bonds of 1857 and 1860, July 31, 1875.

CONTINGENT EXPENSES STATE TREASURER'S OFFICE, FORTIETH AND FORTY-FIRST FISCAL YEARS.

I, Adam Herold, Treasurer of the State of California, do hereby certify that the appropriation for postage, expressage, traveling and contingent expenses in State Treasurer's office, for the fortieth and forty-first fiscal years, has been expended as shown by the following statement:

Fortieth Fiscal Year.

By appropriation.....		\$150 00
To Union Ice Company.....	\$7 60	
To postage, expressage, and box rent.....	34 50	
To rubber stamps.....	5 50	
To subscription to newspapers.....	65 45	
To Directory.....	5 00	
To Western Union Telegraph Company.....	12 49	
To traveling expense of State Treasurer.....	15 50	
To L. M. Landsborough (maps).....	70	
To washing towels.....	3 00	
To unexpended balance June 30, 1889.....	26	
Total.....	\$150 00	\$150 00

Forty-first Fiscal Year.

By appropriation.....		\$300 00
To postage, expressage, box rent, key, etc.....	\$51 50	
To Western Union Telegraph Company.....	43 95	
To Union Ice Company.....	19 55	
To Statistician.....	4 00	
To Directory.....	4 00	
To subscription to newspapers.....	93 15	
To washing towels.....	3 00	
To Hale Bros.....	1 80	
To rubber stamps.....	5 50	
To Joseph Hahn.....	1 00	
To unexpended balance June 30, 1890.....	72 55	
Total.....	\$300 00	\$300 00

ADAM HEROLD.

Subscribed and sworn to before me this twenty-second day of September, 1890.

[SEAL.]

J. S. WILLIAMS,
Deputy Clerk Supreme Court.

REPORT

OF THE

ATTORNEY-GENERAL

OF THE

STATE OF CALIFORNIA.

1889—1890.



SACRAMENTO:

STATE OFFICE, : : : : : J. D. YOUNG, SUPT. STATE PRINTING.
1890.

REPORT.

ATTORNEY-GENERAL'S OFFICE, }
SACRAMENTO, September 30, 1890. }

To his Excellency R. W. WATERMAN, Governor of California :

SIR: In compliance with law, I again respectfully submit my biennial report of the condition of the affairs of this department, accompanying the same with a copy of my docket, and with such suggestions as I have deemed proper to make.

RAILROAD TAXES.

I am pleased to say that the taxes for two years of my administration, to wit: the taxes for the years 1887 and 1888, were paid by the several railroads or railroad corporations.

With the view to getting a decision from the Supreme Court of the United States on the Federal questions involved, or on the supposed conflict between our State Constitution and the Fourteenth Article of Amendment to the Constitution of the United States, an agreed statement of facts was signed by the counsel for the railroads and myself, and filed in the case of the People of the State of California vs. The San Pablo and Tulare Railroad Company, in the United States Circuit Court, involving the taxes for 1885, which accrued before I came into office, and in which case the Court, after filing its findings of fact and conclusions of law, rendered judgment in favor of the railroad company.

All local or State questions were carefully eliminated, so that the record should present only Federal questions, and the stipulation was entered into by both sides with the avowed object of having the great and paramount Federal questions definitely settled. The following is a copy of the stipulation, or agreed statement of facts, and of the findings of the Court:

STIPULATION SETTING ASIDE JUDGMENT AND AGREED STATEMENT OF FACTS.

In the Circuit Court of the United States, Ninth Circuit, in and for the District of California.

THE PEOPLE OF THE STATE OF CALIFORNIA, Plaintiff,
vs.
THE SAN PABLO AND TULARE RAILROAD COMPANY, Defendant. } No. 4,016.

It is hereby stipulated and agreed that the judgment heretofore made and entered in the above entitled action be vacated and set aside, and the cause be submitted to the Court upon the following agreed statement of facts, on which findings shall be made and conclusions of law drawn by the Court:

I.

The cause of action mentioned in paragraphs 1 and 2 of the answer herein was brought without authority of law, and was and is not a bar to this action, and such cause of action has been prior to the trial of this action dismissed.

II.

The defendant is and ever since the first day of April, 1875, has been a corporation existing under the laws of the State of California, and as such it constructed a line of railroad known as the San Pablo and Tulare Railroad, extending from the intersection of the Cen-

tral Pacific Railroad, at Tracy, in San Joaquin County, through Bethany Station, to the northeasterly corner of Alameda County; thence in same course 1.40 miles through the same corner to line of Contra Costa County; thence continuing westerly and southerly through Byron, Brentwood, Bay Point, and Avon, to the intersection of Northern Railway, at Martinez, in Contra Costa County.

That the defendant was on the said first day of April, and ever since has been the owner of and engaged in operating the said railroad in the said counties above mentioned.

The principal place of business of defendant now is and for many years last past has been in the city of San Francisco, State of California.

Some of its stockholders and members now are and ever have been citizens of the United States and residents of said State of California, and some of its stockholders and members now are and ever have been citizens of the United States, and *bona fide* residents of States other than the State of California.

The total length of said railroad in said State of California is forty-six miles, and the length thereof in the respective counties through which it passes is as follows: In the county of San Joaquin, 8.50 miles; in the county of Alameda, 1.40 miles, and in the county of Contra Costa, 36.10 miles.

III.

On the fifteenth day of August, 1885, the State Board of Equalization of the State of California, acting under and by virtue of the powers conferred upon it by the Constitution of the State of California, assessed the franchise, roadway, roadbed, rails, and rolling stock of defendant at the sum of \$900,000. Said Board apportioned the said assessment as follows:

To the county of Alameda, the sum of \$27,392; to the county of Contra Costa, the sum of \$706,304; to the county of San Joaquin, the sum of \$166,304. Upon the said assessment taxes were, in the manner provided by law for the levy of taxes on railroad companies owning railroads operated in more than one county, levied against the defendant for the fiscal year 1885-1886, in the following sums:

For State taxes, the sum of \$4,896, and for county taxes for the county of Alameda, in the sum of \$248 17; for county taxes for the county of Contra Costa, in the sum of \$4,633 35; for county taxes for the county of San Joaquin, in the sum of \$924 65.

After the making of the said assessment the State Board of Equalization did and performed all the acts, duties, and things by law required of them to be done concerning the said assessment. All the acts, duties, and things required by the Constitution of the State of California, and the laws passed in conformity therewith concerning the levy and collection of said taxes alleged to be due to the plaintiff from the defendant, were done and performed prior to the commencement of this action.

IV.

On the second day of September, 1878, the defendant was indebted to divers persons, citizens of the United States, and many of them then and now citizens and *bona fide* residents of the State of California, in large sums of money advanced to construct and equip the railroad of the defendant. To secure the payment of such indebtedness the defendant on said day executed and delivered a mortgage on its said railroad, its franchises, and all rolling stock and appurtenances, a copy of which mortgage is hereto annexed and made part hereof. Said indebtedness exceeded and still exceeds \$3,000 per mile of said road, and no part thereof has ever been paid except the accruing interest, and the whole thereof is now and since the execution of said mortgage has been a valid and subsisting indebtedness against said company, and has been and still is secured by said mortgage.

V.

Said assessment was made for the purpose of taxation for the fiscal year of said State, beginning on the first day of July, 1885, and ending on the thirtieth day of June, 1886, upon the franchises, roadway, roadbed, rails, and rolling stock of said railroad against defendant. Said assessment was not made separately upon the franchise, roadway, roadbed, rails, and rolling stock of said railroad, but all of said properties were blended together in making said assessment, which assessment was then and there so entered upon the minutes of said Board. Said assessment is the assessment upon which the several taxes mentioned in the complaint herein are based, and no other assessment than the aforesaid was ever made of said property, or any part thereof, for said fiscal year. In said assessment there was not included any other property or kinds of property belonging to said defendant corporation, except that of the said franchises, roadway, roadbed, rails, and rolling stock. Said assessment did not include any other of the property or kinds of property mentioned in Section 3665 of the Political Code of California, as amended March 9, 1883, except such franchise, roadway, roadbed, rails, and rolling stock.

VI.

The State Board of Equalization, in making the said assessment, assessed to and against defendant the full cash value of said railroad, roadway, roadbed, rails, rolling stock, and franchise without deducting therefrom the value of the mortgage or any part thereof given and existing thereon, as aforesaid, to secure the indebtedness of said company to the holders of said bonds, notwithstanding they had full knowledge of the existence of such mortgage.

VII.

In making said assessment said State Board of Equalization, acting under and by virtue of the power conferred upon it by the Constitution of the State of California, did not deem or treat such mortgage as an interest in said property, but did assess the whole value of said property to the defendant in the same manner it would have done had there been no mortgage thereon.

VIII.

By the provisions of the Constitution of the State of California, and the laws in pursuance thereof, the right and privilege to be heard in relation to assessments is granted to defendant in respect to the property in question, and before and at the time of the making of said assessment said defendant had full, due, and legal notice thereof, and appeared before the said Board of Equalization, and had a full and legal hearing on the matter of the making of said assessment.

IX.

All railroads owned and operated in more than one county in the State, whether owned by corporations or individuals, were and are assessed in the same manner as the railroad of the defendant.

X.

That from the year 1883 to the year 1886, and during all the times herein mentioned, there was a railroad in use and operation extending from the city of Marysville, in the county of Yuba, to the town of Oroville, in the county of Butte, in the State of California, a distance of twenty-seven miles, which said road was operated in more than one county in this State, and was of the same gauge as the road of defendant, and has ever been operated for like purposes; that said road, with all its equipments, for the period aforesaid was in the ownership and under the operation and control of one N. D. Rideout, a citizen of the United States and a resident of the State of California; that there was for the same period a railroad extending from the town of Santa Cruz, on the Pacific Ocean, and into the county of Monterey, towards the town of Pajaro, a distance of about twenty-one miles; that said road was during the period aforesaid owned, operated, and used for like purposes for which the defendant's road is owned, operated, and used, and that the same was during said period in the ownership and operated by the Pacific Improvement Company, a private corporation formed under the laws of the State of California, which said corporation is not and never has been a railroad corporation; that there was at said period and there now are divers other railroads owned and operated in said State of California by corporations other than railroad corporations and by individuals and partnerships.

XI.

For the purpose of this case only, and not because the defendant admits it as a fact, but denies it, the defendant admits that the State Board of Equalization in making said assessment did not include in the valuation of said roadway, or at all in the said assessment, the value of fences erected upon the land of coterminous proprietors or include in the said assessment the value of any fences whatever, and did not value the said roadway at a greater value than the value of other property similarly situated, or greater than its actual value.

XII.

For the purpose of this case only, and not because defendant admits it as a fact, but denies it, the defendant admits that the said Board of Equalization in making said assessment did not assess the said franchise, roadway, roadbed, rails, or rolling stock of said defendant, or any part thereof, for more than their actual value, or more than their actual cash value, and did not, in making up the values of any part of said property so assessed, include the value of any other property of any kind or nature whatsoever, and did make the said assessment upon the same basis for valuation as all other property in said State is valued for the purposes of taxation.

XIII.

No part of the taxes alleged to have been imposed upon the property of the defendant as aforesaid has ever been paid. To take effect when approved and signed by the Attorney-General.

MARCH 6, 1889.

CREED HAYMOND,
General Solicitor and Attorney for Defendant.
G. A. JOHNSON,
Attorney-General of California.

FINDINGS.

I.

The cause of action mentioned in paragraphs one (1) and two (2) of the answer herein was brought without authority of law and was not and is not a bar to this action, and such action has been, prior to the trial of this cause, dismissed.

II.

Defendant is and ever since the first day of April, 1875, has been a corporation existing under the laws of the State of California, and as such it constructed a line of railroad known as the San Pablo and Tulare Railroad, extending from the intersection of the

Central Pacific Railroad at Tracy, in San Joaquin County, through Bethany Station to the northeasterly corner of Alameda County, and thence in the same course one and forty one hundredths (1.40) miles through the same corner of Alameda County to the line of Contra Costa County; thence continuing westerly and southerly through Byron, Brentwood, Bay Point, and Avon to the intersection of the Northern Railway at Martinez, in Contra Costa County; that the defendant was, on the said first day of April, 1875, and ever since has been, the owner of and engaged in operating the said railroad in said counties.

That the principal place of business of said defendant now is, and for many years last past has been, in the city and county of San Francisco, in said State; that some of its stockholders and members are now and ever have been citizens of the United States, and residents of the State of California; that some of its stockholders and members now are and ever have been citizens of the United States, and *bona fide* residents of States other than the State of California; that the total length of said railroad in said State of California is forty-six (46) miles, and the length thereof in the respective counties through which it passes is as follows, to wit: In the county of San Joaquin, eight and fifty one hundredths (8.50) miles; in the county of Alameda, one and forty one hundredths (1.40) miles; and in the county of Contra Costa, thirty-six and ten one hundredths (36.10) miles.

III.

On the fifteenth day of August, 1885, the State Board of Equalization of the State of California, acting under and by virtue of the powers conferred upon it by the Constitution of the State of California, assessed the franchise, roadway, roadbed, rails, and rolling stock of defendant at the sum of \$900,000, and apportioned the said assessment as follows, to wit: To the county of Alameda, the sum of \$27,392; to the county of Contra Costa, the sum of \$706,304; and to the county of San Joaquin, the sum of \$166,304.

That taxes were levied upon the said assessment in the manner provided by law for the levy of taxes on railroad companies owning railroads operated in more than one county, against the defendant for the fiscal year 1885-1886, in the following sums: For State taxes, the sum of \$4,896, and for county taxes for the county of Alameda, the sum of \$248 17; for county taxes for the county of Contra Costa, in the sum of \$4,633 35; and for county taxes for the county of San Joaquin, in the sum of \$924 65.

That after making the said assessment, the State Board of Equalization did and performed all the acts, duties, and things by law required to be done concerning the said assessment, and all the acts, duties, and things required by the Constitution of the State of California, and all the laws passed in conformity therewith concerning the levy and collection of said taxes alleged to be due to the plaintiff from the defendant, were done and performed prior to the commencement of this action.

IV.

That on the second day of September, 1878, the defendant was indebted to divers persons, citizens of the United States, and many of them then and now citizens and *bona fide* residents of the State of California, in large sums of money advanced to construct and equip the railroad of the defendant; that to secure the payment of said indebtedness the defendant on said day executed and delivered a mortgage on its said railroad, its franchises, and all rolling stock and appurtenances; that said indebtedness did then, and still does exceed \$3,000 per mile on said road, and no part thereof except the accrued interest has ever been paid, and the whole thereof is now, and since the execution of said mortgage has been, a valid and subsisting indebtedness against said company, and has been and still is secured by said mortgage.

V.

The said assessment was made for the purpose of taxation for the fiscal year of said State, beginning on the first day of July, 1885, and ending on the thirtieth day of June, 1886, upon the franchise, roadway, roadbed, rails, and rolling stock of said railroad, against said defendant. The said assessment was not made separately upon the franchise, roadway, roadbed, rails, and rolling stock of said railroad, but all of said properties were blended together in making said assessment, which assessment was then and there so entered upon the minutes of said Board; that said assessment is the assessment upon which the several taxes mentioned in the complaint herein are based; that no other assessment than the aforesaid was ever made of said property or any part thereof for said fiscal year; that in said assessment there was not included any other property, or kinds of property, belonging to said defendant corporation except that of said franchise, roadway, roadbed, rails, and rolling stock, and said assessment did not include any other of the property or the kinds of property mentioned in Section 3665 of the Political Code of the State of California, as amended March 9, 1883, except said franchise, roadway, roadbed, rails, and rolling stock.

VI.

That the State Board of Equalization in making the said assessment assessed to and against said defendant the full cash value of said railroad, roadbed, rails, rolling stock, and franchise without deducting therefrom the value of the mortgage or any part thereof given and existing thereon, as aforesaid, to secure the indebtedness of said company to the holders of said bonds, notwithstanding they had full knowledge of the existence of said mortgage.

VII.

That in making said assessment the State Board of Equalization, acting under and by virtue of the power conferred upon it by the Constitution of the State of California, did not deem or treat such mortgage as an interest in said property, but did assess the whole value of said property to the defendant in the same manner it would have done had there been no mortgage thereon.

VIII.

That by the provisions of the Constitution of the State of California and the laws made in pursuance thereof, the right and privilege to be heard in relation to assessments is granted to defendant in respect to the property in question; that before and at the time of the making of the said assessment said defendant had full, due, and legal notice thereof, and appeared before said Board of Equalization and had a full and legal hearing on the matter of the making of the said assessment.

IX.

That all railroads owned and operated in more than one county in said State, whether owned by corporations or individuals, were and are assessed in the same manner as the railroad of said defendant.

X.

That from the year 1885 to the year 1886, and during all the times herein mentioned, there was a railroad in use and operation, extending from the city of Marysville, in the county of Yuba, to the town of Oroville, in the county of Butte, in said State, a distance of twenty-seven miles, which said road was operated in more than one county in this State, and was of the same gauge as the road of defendant, and has ever been operated for like purposes; that said road, with all its equipments, for the period aforesaid was in the ownership and under the operation and control of N. D. Rideout, a citizen of the United States and a resident of the State of California; that there was for the same period a railroad extending from the town of Santa Cruz, on the Pacific Ocean, and into the county of Monterey, towards the town of Pajaro, a distance of about twenty-one miles; that said road was during the period aforesaid owned, operated, and used for like purposes for which the defendant's road was owned, operated, and used, and that the same was during said period in the ownership of and operated by the Pacific Improvement Company, a private corporation formed under the laws of the State of California, which said corporation is not and never has been a railroad corporation; that there was at said period and there now are divers other railroads owned and operated in said State of California by corporations other than railroad corporations and by individuals and partnerships.

XI.

That the State Board of Equalization in making said assessment did not include in the valuation of the roadway or at all in said assessment the value of fences erected upon the land of coterminous proprietors, or include in the said assessment the value of any fences whatever, and did not value the said roadway at a greater value than the value of other property similarly situated, or greater than its actual value.

XII.

That the said Board of Equalization in making said assessment did not assess the said franchise, roadway, roadbed, rails, or rolling stock of said defendant or any part thereof for more than their actual value or more than their actual cash value, and did not in making up the values of any part of said property so assessed include the value of any other property of any kind or nature whatever, and did make the said assessment upon the same basis for valuation as all other property in said State is valued for the purpose of taxation.

XIII.

That no part of the taxes alleged to have been imposed upon the property of the defendant as aforesaid has ever been paid.

CONCLUSIONS OF LAW.

From the foregoing facts the Court finds, as a conclusion of law, that the defendant is entitled to judgment of dismissal of this action with costs, and judgment is hereby ordered to be entered for the defendant with costs.

SABIN, Judge.

SEPTEMBER 30, 1889.

Indorsed: Filed September 30, 1889. L. S. B. SAWYER, Clerk.

A writ of error was sued out with all possible dispatch, and the case taken to the Supreme Court of the United States, where, on my motion at the October term, 1889, it was advanced on the calendar. In this I showed my earnest desire as representing the people of California to have the Federal question definitely settled. The case was set down for argu-

ment the first Monday of March, 1890; the railroad companies making an ineffectual effort to continue the case until April first, but succeeded in having it continued for one week. I opposed all applications and overtures from the railroad company for a continuance. Before the case was reached, and before April first, the Supreme Court of California made an important decision in the case of *The People, appellant, vs. The Central Pacific Railroad Company, respondent*, which will be found reported, Vol. 83 of the California reports, pp. 393-414. This case and the cognate cases involved the taxes for the year 1886, which also accrued before I came into office. The complaints followed the form of complaint prescribed by the Code, and were demurred to in the lower Court, the Superior Court of the City and County of San Francisco, on various grounds, which Court (Judge Levy presiding) sustained the demurrers. Mr. Delmas, the counsel for the Controller of State in the cases, stood by his complaint, and judgment in the several cases was rendered against the people, from which judgments appeals were taken to the Supreme Court of the State, with the above result. Mr. Justice Fox delivered the opinion, which was concurred in by Justices McFarland, Sharpstein, Paterson, and Works; Chief Justice Beatty and Mr. Justice Thornton dissenting. The tenor of the decision may be seen from the following extract from the syllabus of the opinion:

The scheme for the assessment, levy, and collection of taxes on railroads situated in more than one county, prescribed by Sections 3665 to 3669 of the Political Code, is unconstitutional, as being special legislation not authorized by Section 25 of Article IV of the Constitution.

In my points I contended as follows:

First—Section 13, Article XIII, of the State Constitution, gives plenary power to the Legislature in respect to this whole subject of practice and pleading, and collection of taxes against defendant.

Second—There is no inhibition against local or special laws in regard to pleadings.

Third—The sections of the Code complained of—3668, 3669, and 3670—are not local or special laws.

In my reply brief, I further said:

The Legislature have said in effect that they deem that form of complaint necessary, that it is sufficient, and that in so enacting they are simply carrying out the mandate of the Constitution in Section 13, Article XIII, of the revenue and taxation article.

The subject of revenue and taxation would not be completely dealt with without establishing the form of procedure in the Courts. It would have been a great omission if they had not provided for it. It has stood the test of many years' experience, and as far as I know, has never before been successfully attacked. Should this form of complaint be held defective because in an earlier article—Article IV of the Constitution—there is an injunction against local or special laws in regulating the *practice* of Courts of justice? Taxation was not thought of, or supposed to be affected, by the framers of the Constitution, in making such a provision in respect to the ordinary procedure of the Courts.

Taxation is a subject by itself, and has been treated so in the Constitution. The same rules as to due process of law which are applied to other subjects will not hold good as to taxation. Due process of law is often more of an administrative than a judicial character when it concerns taxation. The reasons are obvious: the necessities of government, the advantage of summary means, the protection given to all in their rights, the precedents handed down by centuries, and the common sense of mankind alike justify and demand a procedure different from that which results in an ordinary money judgment for the collection of a promissory note.

The system of collection of taxes on this kind of property, and the method of bringing suits for this purpose, are by virtue of the same mandate as the assessment of such railroad property by the State Board of Equalization, and that is the Constitution itself.

These laws are general laws; they affect all of a class, and the classification is not only founded on the Constitution, but rests upon reason and public policy. It does not matter if the class may not be large. One may constitute a class, if its enlargement is provided for by future accessions. It is sufficient to know that the classification is neither false nor illusive, and that it embraces all of a class to which they are naturally related.

I filed a petition for rehearing, being determined as far as in my power to avert the disaster entailed by the majority opinion, and said as follows:

After the Constitution had provided in Section 10, of Article XIII, for a distinct and separate régime for the assessment of railroads operated in more than one county, which this Court in the cases of *People vs. Supervisors of Sacramento County*, 59 Cal., p. 321, and *San Francisco and North Pacific Railroad Company vs. The State Board of Equalization*, 60 Cal., p. 29, decided to be a *system* separate and distinct from local assessments by the local Assessor, which was also provided for, and that this system was self-executing, requiring no law to enforce the constitutional mandate, the framers of the Constitution were careful to provide, in Section 13, of the same article, that the Legislature shall pass all laws necessary to carry out the purposes of this Article XIII on the specific subject of revenue and taxation, and to make the system effective. It will not do to say that the passage of these sections which are declared unconstitutional was not necessary, as the necessity of such laws is left with the Legislature, and it is to judge of the necessity, and not the Courts, with this reservation, however, that the cardinal principles of free government are to be maintained. We have cited authorities in our brief on file in the case which sustain this contention; and many more, if necessary, to the same purport can be readily had for the use of the Court. But the decision by Chief Justice Mainhall in *McCullough vs. Maryland*, hereafter cited, as to what the word "necessary" means, is conclusive of that question. This Section 13 is as mandatory as any other section of Article XIII, and to entirely ignore it is to emasculate the system which a previous Supreme Court has declared to exist with respect to railroad property of this class.

The propriety in judicial exegesis of turning from a special subject which the Constitution has treated of as an entirety, to another subject, such as the legislative article, which treats of general matters and specializes nothing, is not apparent, and at least raises such a doubt as to the law of the decision as rendered, as to justify, if not demand from the Court, a rehearing of the case and a fuller argument.

The majority opinion is also in error in stating the following: "Practically admitting that the scheme is 'special,' the appellant justifies it under Section 13 of Article XIII of the Constitution above quoted, claiming that the Legislature is not only authorized but required to pass all laws necessary to carry that article into effect." This error in the majority opinion is apparent from the following quotation from my reply brief:

"My second position, therefore, if the Court should hold against me in my contention as to the meaning of Section 13 of Article XIII of the Constitution, which position I believe to be impregnable, is that the sections of the Political Code complained of, to wit: Sections 3668, 3669, and 3670, are general laws. In the light of the authorities above cited, these sections are neither local nor special. They have been acquiesced in for a number of years, and taxes have been time and again paid under them as general laws."

And in support of this position I reviewed the respondent's authorities, and cited, with liberal extracts therefrom, numerous authorities of my own, to the effect that the classification made by the Legislature in this matter is proper, *and that such laws are general laws.*

The laws thus swept away are the laws passed at the session of the Legislature in 1883; and nothing further can be done in the way of upholding them, unless at the approaching election the personnel of the Court is so changed as to justify the appealing of another case with the view of endeavoring to get the foregoing decision overruled, and the laws of 1883 in regard to railroad taxation revitalized. In such a contingency, I commend this matter to the attention of my successor. I have already stated that this decision was rendered just before, two or three days before, the case of *The People of the State of California vs. The San Pablo and Tulare Railroad Company*, which had been advanced on my motion, was called for argument in the Supreme Court of the United States, the decision of which case it was hoped would ultimately settle the Federal question, whether the Constitution of California in respect to railroad taxation is constitutional under the fourteenth article of amendment.

In the ultimate decision of this question by that tribunal I have entire confidence, and the result may be said to be prefigured in the decision by that Court at that term of the case of the *Bell's Gap Railroad Company vs. The Commonwealth of Pennsylvania*, 134 U. S., pp. 232-240.

As I rose to argue the case, Chief Justice Fuller inquired of me

whether the Supreme Court of California had not just decided that the California railroad tax law violated the Constitution of California. Senator Edmunds and myself then read our respective telegrams as to the purport of the decision. I proceeded to argue for an immediate hearing, when Mr. Justice Gray replied to my argument by asking whether the United States Court ever failed to follow the State's decision regarding a State question, when the State was a party. Thereupon the Court, after consultation, continued the case on its own motion.

The Supreme Court of the United States is not only reluctant to, but will not decide cases on constitutional grounds where there are other grounds upon which they may be decided, and if they can see from the record that in any case the decision of the Court below may have been based upon the ground that the tax law, under which the taxes were assessed, violated the State Constitution, and was therefore void, they will refuse on that ground to reverse.

I regret exceedingly that the decision of our Supreme Court thus prevented the decision of the great Federal questions by the Supreme Court of the United States, and even stopped the argument of those questions by the counsel of the State of California *in limine*.

At the last session of the Legislature I drew up an Act which was entitled "An Act in relation to the re-assessment of property, and the equalization of the same, in cases where a former assessment is invalid or void, and in relation to the collection of taxes on said re-assessment," and discussed its purposes at some length before the Judiciary Committee of the Assembly. Although the Act was a general Act, the object was to lay the basis for recovery of taxes against railroad companies where the assessment for any reason had failed. Such Acts are common in the States, and their constitutionality is unquestionable, as the Legislature, representing the mass of political powers, is only restrained by express limitations or restrictions in the Constitution. But the railroad companies were actively opposed to any such remedial legislation, and their agents wasted a great deal of sympathy on the imaginary condition of some poor person, if the bill became a law, when he found that there were unpaid taxes on his property which were collectible. The result was the bill failed of passage.

THE NEAGLE CASE.

At the same time that I moved to advance the San Pablo and Tulare Railroad case in the Supreme Court of the United States, I made a similar motion in respect to the Neagle case, which motion was also granted. This case, on account of the gravity of the questions involved, at once assumed an aspect of national importance. Anything that affects the respective jurisdictional limits of national and State sovereignty deservedly interests the great mass of the American people, and well it should, for on the solution of such questions by the highest Court in the land, depends not only the correctness of our theory of a republican government, the sanctity of constitutional guaranties, but sooner or later the perpetuity of our free institutions.

It is needless to recount the circumstances connected with the killing of David S. Terry by David Neagle, at the station of Lathrop, in the county of San Joaquin. Neagle was arrested by the authorities of the county, and sued out a writ of habeas corpus from the Circuit Court of

the United States, claiming his deliverance on the ground that he was a Deputy United States Marshal at the time, and did the killing in the defense of the life of Stephen J. Field, a Justice of the Supreme Court of the United States, and in self-defense. Believing that the jurisdiction of San Joaquin County, where the killing took place, had been invaded by the Circuit Court, and that such matters of alleged justification were available in the Courts of that county in favor of Neagle as well as any other citizen, as the law officer of the State, I raised the jurisdictional question in the Circuit Court, and contended that there must be an express Act of Congress, which there was not, conferring jurisdiction upon the Circuit Court in order to oust the jurisdiction of the State Court in such a case. The Circuit Court decided otherwise and discharged Neagle, and without delay, I perfected an appeal to the Supreme Court of the United States, where the case was advanced on the calendar, as already stated.

I was ably assisted by Messrs. Shellabarger & Wilson, and Hon. Zach. Montgomery, of Washington City, representing the State of California, while the United States Government was represented by Attorney-General Miller, and by Joseph H. Choate and James C. Carter, of New York City. As in the railroad tax case in the Supreme Court of California, so in *Ex Parte Neagle* in the Supreme Court of the United States the Court was not unanimous, Chief Justice Fuller and Mr. Justice Lamar dissenting from the majority opinion, and holding that the Circuit Court, in the absence of an express Act of Congress, had no jurisdiction of the case, which should have been tried, as any other case under the same circumstances, in the Courts of San Joaquin County. The expedition with which this case was attended to may be seen from the fact that the killing was done in August, 1889, a hearing had in the Circuit Court, an appeal taken, the case on appeal argued in March, 1890, the case decided in May, and in about a year after the homicide the case was reported at length in 135 U. S. Reports, pp. 1-100.

It was due to California that the question involved should be definitely settled, as it concerned the jurisdiction of our State Courts; and however much I regret the conclusion at which a majority of the Court arrived, yet I have endeavored to show that I will not acquiesce in any attempts to circumscribe the jurisdiction of the State without an authoritative decision from the highest Court in the land, and subjecting the contention to all possible scrutiny, both legal and public.

CHAE CHAN PING VS. THE UNITED STATES.

The Legislature of the State, by an Act approved February 13, 1889, appointed me, in connection with Hon. Stephen M. White and Hon. John F. Swift, to represent the interests of the people of the State at Washington, in the United States Supreme Court, in said case. The case involved the validity of the Exclusion Act, passed by Congress, which went into effect October 1, 1888, and which prohibited Chinese laborers from entering the United States after that date.

The Act was held constitutional by the Circuit Court for the District of California, on an application for a writ of habeas corpus by Chae Chan Ping, and thereupon he appealed to the Supreme Court. Although the case was not a State case, and did not come within my duties as Attorney-General of the State, raising simply a question between the United

States and Chae Chan Ping, yet, in obedience to the mandate of the Legislature, I went on to Washington and filed a brief in the case, and assisted in the oral argument. Hon. G. A. Jenks, Solicitor-General of the United States, represented that Government.

Chae Chan Ping was represented by ex-Governor George Hoadley, of Ohio, and James C. Carter, Esq., of New York City.

Like the Neagle case, it was a case of national importance, and in the result of which, on account of the increasing influx of Mongolians into our State, the deteriorating effects of this kind of immigration, together with the convenience with which it could be effected, California was specially interested.

We took the broad ground, which had been affirmed and reaffirmed by the Supreme Court of the United States long before, that Congress had the power to abrogate a treaty between the United States and any foreign power. I also took the ground that the Congress of the United States could not abdicate nor surrender its sovereignty, which had been confided to it by the Constitution; that its powers were in the nature of trusts to be exercised for the good of the people, and that whatever rights Chinese laborers had under the treaty they were simply privileges conferred, and were not contracts, and a withdrawal of these privileges by the law-making power was not obnoxious to the constitutional provision in respect to the impairment of the obligation of contracts. These positions were indorsed by the Supreme Court, and the doctrine definitely settled that such privileges do not fall within the domain of contracts. The decision of the Circuit Court was affirmed, and the barriers interposed by Congress against this alien irruption held intact. The legitimate outcome of the decision is that Congress may effectually prohibit all Mongolian immigration, treaty or no treaty, as a part of the public policy of the country.

The case referred to may be found reported in 130 United States, pp. 581-611.

THE GOLDENSON CASE.

This case excited a very general interest throughout the State, on account of the singular atrocity of the murder, and the victim, Mary Elizabeth Kelly, being a little girl only fourteen years of age. It speaks well for the law-abiding character of our people that the intense feelings, which the murder gave rise to, did not find vent in any overt act of summary vengeance. On account of the numerous exceptions taken by the learned counsel of the defendant, some apprehension was felt as to the result of the case when submitted to the calm equipoise of the judicial mind.

No judgment or affirmance in a criminal case, where the defendant was found guilty, ever met with more general approval.

THE BOWERS CASE.

This case excited almost as much general interest as the Goldenson case. J. Milton Bowers was indicted for the murder of his wife, Cecilia Bowers, and the evidence on behalf of the People aspired to prove homicide by slow poisoning. The record was very voluminous, and embraced much medical and expert testimony. The judgment of conviction and order denying a new trial was affirmed by six of the Justices of the Supreme Court. A rehearing was subsequently granted,

and the defendant granted a new trial by the Supreme Court. The District Attorney of San Francisco deeming that he could not make the inculpatory facts any stronger on a second trial than on the first, dismissed the case with permission of the Superior Court. In the judgment of this office, the first opinion correctly embodied the law, and the circumstances which were sought to raise a doubt about Bowers' guilt, such as the alleged confession of Benhayon, the brother of the deceased, before his death, were matters only to be submitted to the Governor on an application for pardon or commutation of sentence. It consumed a great deal of the time of this office in following this case through its many devious windings.

It will be seen from the annexed copy of my docket that since my last report there have been a great many criminal cases which have received the attention of this department. Our labors and the labors of the Supreme Court have been greatly lessened by the passage of the Act requiring records in criminal cases to be printed. We had the honor of making the first suggestion that this change should be made, and embodied the suggestion in our last biennial report. Subsequently we drafted the Act which became the law. Had this been the law when the Bowers case was under consideration, great time and labor would have been saved by being spared ineffectual efforts to decipher eleven or twelve huge manuscript volumes of the record.

CIVIL CASES.

Besides those already mentioned, we deem it proper to allude specially to a few others. Charles Sutro brought suit against the Controller to recover on certain bonds for Indian War expenses. I defended the action, claiming that there could be no recovery, as the bonds were payable only out of money thereafter to be appropriated by Congress, which was never done. Judgment went for the defendant, and on appeal the judgment was affirmed. The syllabus of the case, 74 Cal., p. 593, is sufficiently explanatory:

A *bona fide* purchase of bonds issued by the State of California for the loss of property incurred during the suppression of Indian hostilities, which bonds recite their issue in conformity with the Act of April 25, 1857, and which are made payable only out of money thereafter to be appropriated by Congress for the payment of such expenses, is charged with notice of all the conditions imposed by the Acts of the Legislature and of Congress upon the subject of the Act of April 25, 1859, and cannot enforce the payment of the bonds until an appropriation therefor has been made by Congress.

Hoagland vs. State.—This was an action which was brought by permission of the State against itself to settle an alleged claim of damages in the sum of about \$40,000, by the straightening of the channel of the American River at its point of confluence with the Sacramento, by the Levee Commissioners of the city of Sacramento, done by them in the year 1862, in pursuance of an Act of the Legislature. We interposed a demurrer below, which was sustained by the Court, and on appeal the judgment was affirmed. We quote from the syllabus:

Held, that the language of the Act excludes the idea that any liability was admitted, or any defense waived except that of immunity from suit. The State may still interpose the defense that it was engaged as a State in a public work for the common good. Under the language of the California Constitution as it existed prior to 1879, when the State, for public purposes, turns or straightens the channel of a river where it empties into another river, so that the land on the opposite side is, five years afterwards, injured or destroyed by the increased velocity of the current, such damage is not a "taking" of land for public use, and does not entitle the owner to compensation.

In the cases against Gray and his bondsmen, and also the cases against the Harbor Commissioners and their sureties, involving the same defalcation, I have repeatedly urged, both by letter and telegraph, the counsel representing the State, all of whom were employed before I came into office, to bring said cases to a trial. I have to say that when attorneys are appointed for a specific duty and accept, it is their place to go ahead, and await no further instructions. All the instructions given by this office have been to urge the cases to trial, and I have been very much chagrined at the delay, for which there is probably some excuse, such as the death of Blanding pending the actions, and subsequently the death of one of the counsel.

Wearying of the continued procrastination, on December 4, 1889, I wrote a letter to Messrs. Langhorne & Miller, attorneys at law, San Francisco, of which the following is a copy:

Understanding that Major Mhoon's health is not good, and that he desires legal assistance in the cases pending in Judge Hunt's Department against the State Board of Harbor Commissioners and their bondsmen, on account of the defalcation of Gray, I desire you to assist Major Mhoon, and take immediate steps to bring the cases to trial. The cases have been pending a long time, and should be pressed vigorously to a finality.

Also, in the cases against Gray and his sureties, which Mr. Baggett has in hand, and in which there was an adverse decision by the lower Court, an appeal should be taken from the final judgment and order denying the motion for new trial. As Mr. Baggett, I understand, is absent in Tennessee, you will please see that the appeal is properly perfected, if necessary that this should be attended to on account of Baggett's absence.

I am informed that the Harbor Commissioners' cases are now definitely set down for trial, and before long it is to be hoped that the State may recover what it has lost by reason of this defalcation.

CORRESPONDENCE.

With the best efforts of this office, it is almost impossible to keep pace with the mass of correspondence which we have to deal with. We have endeavored to answer all letters and give the desired information, or suggest where the information could be had. I am aware that the duties devolved upon me do not require this, but generally we found it about as easy to give the information as to write why we do not, to be followed by subsequent requests for an early answer.

During the four years of our incumbency of this office, there will have been written letters and opinions covering about thirty-five hundred pages of letter book, embodying our views on various constitutional and legal questions, in response to State officers, county officers, city officers, and private persons. The school law and its exposition has been a source of endless inquiry, and it is to be hoped that the next Legislature will clear up and symmetrize this important subject.

Our election and registration laws are discordant and bewildering, and need entire revision. Inquiries on this subject are numerous. For instance, Section 1094, Political Code, as amended by the last Legislature, says:

There shall be in each of the counties, and cities and counties, in the State (when required by the Board of Supervisors) a new and complete registration of the voters of such counties, and cities and counties, who are entitled thereto, and who apply with the proper proof. Such registration shall commence one hundred days before a general election, and shall continue for eighty-five days thence next ensuing, when such registration shall cease; *provided*, that nothing in this section shall be held to repeal any election or registration law applicable to or in force in the city and county of San Francisco.

Yet, under Section 1227, no person is allowed to vote whose name is not on the printed register in use at the precinct, and there is no provision for printing the register which is thus made up eighty-five days before a general election; the only provisions being in Sections 1113 and 1115, when the registration is to close on the first Monday of October, when there is a general or Presidential election, and on the thirtieth day prior to each general election held every two years thereafter, and the Clerk is to print and distribute the lists within fifteen days after the register is closed. I have held, however, that it is manifestly the intention of Section 1094 that those persons allowed thereby to register at a later day should vote, and that Boards of Supervisors may order a supplemental register for this purpose, under the general permanent powers of such Boards.

Again, the question is frequently asked this office, "Can a person vote on a clerk's certificate?"

Section 1117 says: "A certified copy of an uncanceled entry upon the Great Register is prima facie evidence that the person named on the entry is an elector of the county."

I have held, however, that to vote, the elector's name must be on the printed register used at the precinct.

I would suggest, also, that the "Act to regulate contracts on behalf of the State in relation to erections and buildings," approved March 23, 1876, Statutes 1875-6, p. 427, be amended. It is cumbersome and awkward in its phraseology, and entails a great deal of unnecessary expense in respect to giving public notice in daily papers for four weeks, when and where sealed proposals will be received for labor and materials for the erection of public buildings. It could be improved in a good many other respects.

The disbursements of this office during the last two years are a matter of record in the Controller's office, as well as any moneys which have come into the hands of the Attorney-General, all of which will sufficiently appear from the Controller's report.

Before closing this report, I desire to say that my relations with the other State officers have been uniformly pleasant and agreeable, and I hope that the suggestions embodied herein will meet with your Excellency's approval. I have the honor to be,

Very respectfully, your obedient servant,

G. A. JOHNSON,
Attorney-General.

DOCKET.

CIVIL CASES NOTICED IN PRIOR REPORTS, BUT DECIDED SINCE MY LAST REPORT.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
11631.—The People, etc., ex rel. E. C. Marshall, Attorney-General, Respondent, vs. Thomas C. Van Ness, et al., Appellant. Langhorne & Miller, for Respondent.	Superior Court of San Francisco.	Civil.	By complaint to recover on official bond.	Complaint filed April 23, 1885. May 1, 1885, cause argued. Judgment for Plaintiff for \$2,656 92, September 22, 1885. Notice of appeal filed March 5, 1886.	Transcript filed. Judgment for People affirmed.	
9733.—The People, etc., Respondent, vs. Leeland Stanford, Appellant. J. P. Meux for Respondent, McAllister & Bergin for Appellant.	Superior Court of San Francisco.	Civil.	By complaint to forfeit franchises and restrain from operating the Potrero and Bay View Railroad.	Judgment for Plaintiff.	Judgment affirmed April 30, 1888. Petition for rehearing filed. Rehearing granted. Judgment reversed November 21, 1888.	
The People, etc., ex rel. Christopher Hacke, Respondent, vs. The Hieremia Savings and Loan Society, Appellant. Attorney-General and W. S. Goodfellow for Plaintiff, Tobin & Tobin and Thomas F. Barry for Defendant.	Superior Court of San Francisco.	Civil.	By complaint to remove obstructions in street, and to declare street a public highway.	Complaint filed November 25, 1884. Answer filed May 22, 1885. Judgment for Plaintiff May 21, 1887. Notice of appeal filed December 15, 1887.	Judgment for Plaintiff affirmed June 30, 1890.	
The People, etc., ex rel. T. J. Le Tournoux vs. W. D. McCarthy.	Superior Court of San Francisco.	Civil.	By complaint to determine title to office of member of the Board of Health of the City and County of San Francisco.	Leave to sue granted and bond approved December 28, 1887. David McClure for Petitioner. Judgment for Defendant.	Judgment reversed and cause remanded May 1, 1889.	No. 15, 1887.

The People, etc., ex rel. Henry M. Fiske vs. Charles A. Clinton.	Superior Court of San Francisco.	Civil.	By complaint to determine title to office of member of the Board of Health of the City and County of San Francisco.	Leave to sue granted and bond approved December 28, 1887. David McClure for Petitioner. Judgment for Defendant.	Judgment reversed and cause remanded May 1, 1889.	No. 16, 1887.
The People, etc., ex rel. Charles McQuesten vs. Julius Rosenstirn.	Superior Court of San Francisco.	Civil.	By complaint to determine title to office of member of the Board of Health of the City and County of San Francisco.	Leave to sue granted and bond approved December 28, 1887. David McClure for Petitioner. Judgment for Defendant.	Judgment reversed May 1, 1889.	No. 17, 1887.
The People, etc., ex rel. Joseph A. Davidson vs. A. W. Perry.	Superior Court of San Francisco and Supreme Court of California.	Civil.	By complaint to determine title to office of member of the Board of Health of the City and County of San Francisco.	Leave to sue granted and bond approved December 28, 1887. David McClure for Petitioner. Complaint filed December 30, 1887. Demurrer filed January 9, 1888. Judgment for Defendant February 16, 1888. Notice of appeal filed February 16, 1888.	Transcript filed. Judgment reversed May 1, 1889.	No. 18, 1887.
11769—The People, etc., ex rel. C. T. Settle, Mayor, etc., vs. E. B. Reed et al.	Superior Court of Santa Clara County.	Civil.	By complaint to have obstructions in street of San José abated as a nuisance.	Leave granted by former Attorney-General renewed by written authority given March 22, 1887. D. W. Herrington for Petitioner. Judgment for Plaintiff.	Reversed, with directions to enter judgment for Defendant on the findings.	
12400—The People, etc., vs. W. E. Eichbroth.	Superior Court of Tuolumne County.	Civil.	By complaint to determine title to office of County Physician of Tuolumne County.	Complaint filed July 25, 1887. Answer filed September 5, 1887. Judgment for Defendant November 30, 1887. Notice of appeal filed December 2, 1887.	Transcript filed. Judgment affirmed January 19, 1889.	No. 8, 1887.

SUITS BROUGHT IN THE NAME OF THE PEOPLE.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
The People, etc., ex rel. George A. Johnson, Attorney - General, vs. American Sugar Refining Company.	Superior Court of San Francisco.	Civil.	By complaint to vacate charter and forfeit franchise.	Leave to sue granted, no bond required, November 1, 1888. Mitchell, Dunne & Ackerman representing the Attorney-General. Judgment of lower Court to forfeit franchise.		No. 14, 1888.
The People, etc., ex rel. J. C. L. Wadsworth, Insurance Commissioner, vs. Fire Relief Association of California.	Superior Court of San Francisco.	Civil.	By complaint for forfeiture of \$200 for issuing policy of insurance without certificate from the Insurance Commissioner.	Leave to sue granted, no bond required, November 3, 1888. T. C. Coogan for Relator.		No. 15, 1888. Action brought to test question whether it is necessary for the defendant to have a certificate from the Insurance Commissioner.
The People, etc., ex rel. Martin Urtasan vs. Grastient Baron.	Superior Court of Los Angeles County.	Civil.	By complaint to set aside a patent.	Leave to sue granted November 20, 1888. R. J. Stephens and Appel for Relator.		No. 16, 1888.
The People, etc., ex rel. J. M. Dodge vs. M. D. Hamilton.	Superior Court of San Diego County.	Civil.	By complaint to oust Defendant from the office of County Clerk and to instate Relator therein.	Leave to sue granted and bond approved January 14, 1888. Leavy & Humes and Trippet & Neale for Relator.		No. 1, 1889.

The People, etc., ex rel. Oliver Eldridge vs. Martin Bulger.	Superior Court of San Francisco.	Civil.	By complaint to oust Defendant from the office of Pilot Commissioner of San Francisco and to institute Relator therein.	Leave to sue granted and bond approved April 23, 1889. Page & Eells, attorneys for Relator.	No. 2, 1889. Leave was granted in this case, because the Governor directed it. (C. C. P., Sec. 803.)
The People, etc., ex rel. E. W. Travers vs. A. C. Freese.	Superior Court of San Francisco.	Civil.	By complaint to oust Defendant from the office of Pilot Commissioner of San Francisco and to institute Relator therein.	Leave to sue granted and bond approved April 23, 1889. J. N. E. Wilson and Geo. N. Williams, attorneys for Relator.	No. 3, 1889. Leave was granted because the Governor directed it. (Sec. 803, C. C. P.)
The People, etc., ex rel. Horace Peter vs. The Saratoga and Pescadero Turnpike and Wagon Road Company.	Superior Court of Santa Cruz County.	Civil.	By complaint to dissolve corporation and forfeit franchise.	Leave to sue granted and bond approved April 23, 1889. W. T. Jester, attorney for Relator.	No. 4, 1889.
The People, etc., ex rel. J. A. Graves vs. W. M. McFadden, Andrew B. Cauldwell, J. W. Town-er, John H. Kellum, and R. I. Wickham.	Superior Court of Los Angeles County.	Civil.	By complaint to obtain a judgment that Defendants are not entitled to the offices of Commissioners to perfect the organization of the proposed Orange County.	Leave to sue granted upon condition that new bond is filed substituting name of McFadden for Gardiner, May 6, 1889. Chapman & Hendricks, attorneys for Relator. Judgment for Defendant.	No. 5, 1889. To test constitutionality of Act to create county of Orange.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CIVIL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
The People, etc., ex rel. H. C. Veatch, Plaintiff, vs. The Bear-Creek Toll Road Company, Defendant.	Superior Court of Santa Cruz County.	Civil.	By complaint to forfeit the franchises of and dissolve the Defendant corporation.	Leave to sue granted and bond approved May 14, 1889. W. T. Jeter, attorney for Relator.		No. 6, 1889.
The People, etc., ex rel. Thomas E. Ryan, Plaintiff, vs. William C. Eidenmuller, Emma E. Eidenmuller, Georgiana Eidenmuller, Candida Eidenmuller, and Eliza Hawxhurst.	Superior Court of San Francisco.	Civil.	By complaint to abate a nuisance and declare street a public highway.	Leave to sue granted and bond approved May 23, 1889. Thos. F. Barry, attorney for Relator.		No. 7, 1889.
The People, etc., ex rel. F. P. Bacon, Plaintiff, vs. Sonoma Valley Improvement Company (a corporation), Defendant.	Superior Court of San Francisco.	Civil.	By complaint to vacate charter of Defendant corporation and forfeit its franchise, and for \$5,000 damages.	Leave to sue granted and bond approved May 24, 1889. R. B. Mitchell, attorney for Relator.		No. 8, 1889.
The People, etc., ex rel. J. J. Groom, Plaintiff, vs. W. E. Taylor, Defendant.	Superior Court of San Francisco.	Civil.	By complaint to oust Defendant, W. E. Taylor, from the office of Coroner of San Francisco, and instate J. J. Groom therein.	Leave to sue granted and bond approved May 28, 1889. George A. Knight, attorney for Relator.		No. 9, 1889. October 26, 1889, dismissed on motion of Knight.

The People, etc., ex rel. Frank Sabichi, Plaintiff, vs. Los Angeles Electric Railway Com- pany, Defendant.	Superior Court of Los An- geles County.	Civil.	By complaint to exclude Defendant from office and franchise, ac- quired under a munic- ipal ordinance of the city of Los Angeles.	Leave to sue granted and bond approved May 29, 1889. Frederick Hall, at- torney for Relator.	No. 10, 1889.
The People, etc., ex rel. J. C. L. Wadsworth, Plaintiff, vs. The Stockton Mutual In- demnity Association (a corporation), Defend- ant.	Superior Court of San Joa- quin County.	Civil.	By complaint to require Defendant to show cause why the busi- ness of said corpora- tion should not be closed permanently, or until it has fully complied with all the provisions of Article XVI, Chapter III, Title I, Part III, of Political Code.	Relator directed to employ counsel to bring suit May 23, 1889. T. C. Coogan, attorney for Relator.	No. 11, 1889.
The People, etc., ex rel. H. R. Mann, Plaintiff, vs. Frank G. Edwards, Defendant.	Superior Court of San Fran- cisco.	Civil.	By complaint to exclude Defendant from office of member of Board of Fire Commissioners of City and County of San Francisco, and to in- state Relator therein; also, to fine Defendant \$5,000.	Leave to sue granted and bond approved June 4, 1889. Wilson & Wilson, attor- neys for Relator.	No. 12, 1889.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CIVIL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
The People, etc., ex rel. Maurice Schmidh, Plaintiff, vs. Martin Kelly, Defendant.	Superior Court of San Francisco.	Civil.	By complaint to exclude Defendant from office of member of Board of Fire Commissioners of City and County of San Francisco, and to institute Relator therein; also, to fine Defendant \$5,000.	Leave to sue granted and bond approved June 4, 1889. Wilson & Wilson, attorneys for Relator.		No. 13, 1889.
The People, etc., ex rel. William B. Wilshire, Plaintiff, vs. Samuel Neuman, Defendant.	Superior Court of San Francisco.	Civil.	By complaint to exclude Defendant from office of member of Board of Fire Commissioners of City and County of San Francisco, and to institute Relator therein; also, to fine Defendant \$5,000.	Leave to sue granted and bond approved June 4, 1889. Wilson & Wilson, attorneys for Relator.		No. 14, 1889.
The People, etc., ex rel. Charles H. Haswell, Plaintiff, vs. Fisher Ames, Defendant.	Superior Court of San Francisco.	Civil.	By complaint to exclude Defendant from office of member of Board of Fire Commissioners of City and County of San Francisco, and to institute Relator therein; also, to fine Defendant \$5,000.	Leave to sue granted and bond approved June 4, 1889. Wilson & Wilson, attorneys for Relator.		No. 15, 1889.

The People, etc., ex rel. Peter F. Dunne, Plaintiff, vs. Daniel J. Mahoney, Defendant.	Superior Court of San Francisco.	Civil.	By complaint to exclude Defendant from office of member of Board of Fire Commissioners of City and County of San Francisco, and to instate Relator therein; also, to fine Defendant \$5,000.	Leave to sue granted and bonds approved June 4, 1889. Wilson & Wilson, attorneys for Relator.	No. 16, 1889.
The People, etc., ex rel. J. R. Laine, Plaintiff, vs. G. G. Tyrrell, Defendant.	Superior Court of San Francisco.	Civil.	By complaint to oust Defendant from office of member of State Board of Health, and to instate Relator therein.	Leave to sue granted and bond approved June 6, 1889. A. L. Hart, attorney for Relator.	No. 17, 1889.
The People ex rel. Thos. Alonzo LeFevre, Plaintiff, vs. Geo. F. Brander and Richard O'Neill, Defendants.	Superior Court of San Diego County.	Civil.	By complaint to cancel certificate of purchase and patent.	Leave to sue granted and bond approved June 24, 1889. Hunsaker & Britt, attorneys for Relator.	No. 18, 1889.
The People ex rel. Chas. J. Swift, Plaintiff, vs. Henry Bingham, Defendant.	Superior Court of San Francisco.	Civil.	By complaint to oust Defendant from the office of Supervisor of San Francisco, and have the office declared vacant; also, to fine him \$5,000, and for costs.	Leave to sue granted and bond approved June 25, 1889. Judgment for Defendant. Horace W. Philbrook, attorney for Relator.	No. 19, 1889.
The People, Plaintiff, vs. A. J. Tait, Defendant.	Superior Court of Sacramento County.	Civil.	By complaint to restrain Defendant from obstructing the Sacramento River.	Leave to sue granted and bond approved June 27, 1889. John T. Harrington, attorney for Plaintiff.	No. 20, 1889.

Judgment reversed, with instructions to overrule the demurrer, December 30, 1889.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CIVIL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
The People ex rel. Henry Schwartz, Plaintiff, vs. Frank Temple et al., Defendants.	Superior Court of San Diego County.	Civil.	By complaint to set aside the approval of the locations made by said Defendants, and the certificates of purchase and patents issued to them.	Leave to sue granted and bond approved July 6, 1889. Hunsaker & Britt, attorneys for Relator.		No. 21, 1889.
The People ex rel. Henry Schwartz, administrator of the estate of Louis Schwartz, deceased, Plaintiff, vs. Frank Temple et al., Defendants.	Superior Court of San Diego County.	Civil.	By complaint to set aside the approval of the locations made by said Defendants, and the certificates of purchase and patents issued to them.	Leave to sue granted and bond approved July 6, 1889. Hunsaker & Britt, attorneys for Relator.		No. 22, 1889.
The People ex rel. Andrew Johnson, Plaintiff, vs. Herman C. Hansen, Defendant.	Superior Court of Humboldt County.	Civil.	By complaint to have Third Street of the town of Hydesville declared a public highway, and to enjoin Defendant from obstructing the same.	Leave to sue granted and bond approved August 2, 1889. Gillett & Coonan, attorneys for Relator.		No. 23, 1889.
The People ex rel. Cornelius T. Sanders, Plaintiff, vs. M. P. Jones et al., Defendants.	Superior Court of San Francisco.	Civil.	By complaint to declare Touchart Street, San Francisco, a public highway, and enjoin Defendants from obstructing the same.	Leave to sue granted and bond approved August 13, 1889. John Desbeck, attorney for Relator.		No. 24, 1889.

The People ex rel. Bernard Flaherty, Plaintiff, vs. Dorothea M. Klumpke et al., Defendants.	Superior Court of San Francisco.	Civil.	By complaint to declare San José Avenue a public highway and enjoin Defendants from obstructing the same.	Leave to sue granted and bond approved August 23, 1889. J. G. Maguire, attorney for Relator.	No. 25, 1889.
The People, Plaintiff, vs. Douglas Gunn, Defendant.	Superior Court of San Diego County.	Civil.	By complaint to oust Defendant from the office of Mayor of San Diego, and for costs.	Leave to sue granted by direction of the Governor August 14, 1889. Judgment for Defendant. Hunsaker & Britt and W. W. C. Ecker, attorneys for Plaintiff.	No. 26, 1889.
The People ex rel. J. A. Graves, Plaintiff, vs. The County of Orange, Defendant.	Superior Court of Los Angeles County.	Civil.	By complaint to exclude Defendant from all rights, powers, privileges, etc., of such municipal corporation.	Leave to sue granted and bond approved August 23, 1889. Judgment for Defendant. Chapman & Hendricks, attorneys for Relator.	No. 27, 1889.
The People ex rel. J. A. Graves, Plaintiff, vs. The County of Orange et al., Defendants.	Superior Court of Los Angeles County.	Civil.	By complaint to exclude Defendant, County of Orange, from all rights, powers, etc., of such municipal corporation, and to oust other Defendants from the office of members of the Board of Supervisors.	Leave to sue granted and bond approved August 23, 1889. Judgment for Defendant. Chapman & Hendricks, attorneys for Relator.	No. 28, 1889.
The People ex rel. Trinity County, Plaintiff, vs. The Shasta and Yreka Turnpike Company (a corporation), Defendant.	Superior Court of Trinity County.	Civil.	By complaint to forfeit the charter of Defendant corporation, and declare road a public highway.	Leave to sue granted September 23, 1889. Jas. W. Bartlett, attorney for Relator.	No. 29, 1889.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CIVIL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged	Character of Action.	Mode of Prosecution.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
The People ex rel. Benjamin Morgan, Plaintiff, vs. R. Y. Hayne et al.; Defendants.	Superior Court of San Francisco.	Civil.	By complaint to compel Defendants to show by what right and authority they exercise judicial powers.	Leave to sue granted and bond approved September 26, 1889. Judgment for Defendants January 6, 1890. Notice of appeal filed January 13, 1890.	Affirmed.	No. 30, 1889. Testing constitutionality of Act creating Supreme Court Commission.
The People ex rel. Benjamin I. Simmons, Plaintiff, vs. Adolph Levi, and F. I. Hooper, Defendants.	Superior Court of San Diego County.	Civil.	By complaint to cancel patent and enjoin Defendants from claiming lands.	Leave to sue granted and bond approved October 4, 1889. Wm. Darby, attorney for Relator.		No. 31, 1889.
The People ex rel. J. C. L. Wadsworth, Plaintiff, vs. The Guaranty Endowment Benevolent Association (a corporation), Defendant.	Superior Court of San Francisco.	Civil.	By complaint to forfeit Defendant's franchises and appoint a receiver to settle its affairs.	Leave to sue granted and bond approved October 9, 1889. Carl Spelling, attorney for Relator.		No. 32, 1889.
The People ex rel. Emma and Andrew Rose, Plaintiffs, vs. F. Lemme, C. Glisbholm, and Robert Mitchell, Defendants.	Superior Court of San Francisco.	Civil.	By complaint to enjoin Defendants from appropriating or obstructing Berry or Martin Street.	Leave to sue granted and bond approved October 10, 1889. Estee, Wilson, & McCutchen, attorneys for Relators.		No. 33, 1889.

The People ex rel. E. S. Lipsett, Plaintiff, vs. W. P. Edwards, Defendant.	Superior Court of Sonoma County.	Civil.	By complaint to abate nuisance, and for \$1,000 damages.	Leave to sue granted and bond approved October 30, 1889. A. B. Ware and T. J. Geary, attorneys for Relator.	No. 34, 1889.
The People ex rel. Andres Rico, Plaintiff, vs. J. Chauncey Hayes et al., Defendants.	Superior Court of San Diego County.	Civil.	By complaint to cancel patents and enjoin Defendants from claiming title to lands.	Leave to sue granted and bond approved Nov. 8, 1889. M. L. Short, attorney for Relator.	No. 35, 1889.
The People ex rel. D. B. Frazer, Plaintiff, vs. J. Chauncey Hayes et al., Defendants.	Superior Court of San Diego County.	Civil.	By complaint to cancel patents and enjoin Defendants from claiming title to lands.	Leave to sue granted and bond approved Nov. 8, 1889. M. L. Short, attorney for Relator.	No. 36, 1889.
The People, etc., ex rel. T. M. Yates, Plaintiff, vs. W. B. Parker and Francis Houghton, Defendants.	Superior Court of Tehama County.	Civil.	By complaint to annul patent, and for costs.	Leave to sue granted and bond approved December 24, 1889. J. E. Prewett, attorney for Relator.	No. 37, 1889.
The People, etc., ex rel. Edison F. Adams, Plaintiff, vs. The City of Oakland, Defendant.	Superior Court of Alameda County.	Civil.	By complaint to compel Defendant to show by what warrant it claims to have, use, and enjoy its franchise.	Leave to sue granted and bond approved January 13, 1890. W. W. Foote, attorney for Relator.	No. 1, 1890.
The People, etc., ex rel. Eugene Frandzen, Plaintiff, vs. L. L. Boone, Defendant.	Superior Court of San Diego County.	Civil.	By complaint to oust Defendant from office, and instate Relator therein.	Leave to sue granted and bond approved January 23, 1890. Monteith & Goodwin, attorneys for Relator.	No. 2, 1890.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CIVIL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
The People, etc., Plaintiff, vs. City of Los Angeles, H. W. Latham, and L. M. Bigelow, Defendants.	Superior Court of Los Angeles County.	Civil.	By complaint to declare Little Plaza a public court or street, and to remove as a nuisance the building that the Defendant corporation has erected on it.	Leave to sue granted and bond approved March 28, 1890. Smith, Winder & Smith, attorneys for Plaintiff.		No. 3, 1890.
The People, etc., ex rel. G. A. Johnson, Attorney-General, Plaintiff, vs. B. F. Bagley et al., Defendants.	Superior Court of San Joaquin County.	Civil.	By complaint to compel Defendants to show by what right and authority they exercise the powers and duties of Councilmen of the city of Stockton.	Leave to sue granted and bond approved April 22, 1890. Carter & Smith, attorneys for Plaintiff.	Judgment for Defendants affirmed August 5, 1890.	No. 4, 1890.
The People, etc., ex rel. Thomas J. Parsons, Plaintiff, vs. Frank G. Edwards, Defendant.	Superior Court of San Francisco.	Civil.	By complaint to oust Defendant from office of Fire Commissioner of San Francisco, and to instate Relator therein.	Leave to sue granted and bond approved April 30, 1890. J. C. Bates, attorney for Relator.		No. 5, 1890.
The People, etc., ex rel. Z. P. Clark, Plaintiff, vs. Daniel J. Mahoney, Defendant.	Superior Court of San Francisco.	Civil.	By complaint to oust Defendant from office of Fire Commissioner of San Francisco, and to instate Relator therein.	Leave to sue granted and bond approved April 30, 1890. J. C. Bates, attorney for Relator.		No. 6, 1890.

The People, etc., ex rel. George W. Prince, Plaintiff, vs. D. N. Hastings and C. B. Houghton, as Executors, Defendants.	Superior Court of Santa Cruz County.	Civil.	By complaint to require Defendants to convey to Relator the title to a section of land which Peabody, deceased, held in trust for said Relator.	Leave to sue granted and bond approved May 3, 1890. Z. N. Goldsby, attorney for Relator.	No. 7, 1890.
The People, etc., ex rel. G. A. Johnson, Attorney-General, Plaintiff, vs. Reclamation District No. 157 et al., Defendants.	Superior Court of San Joaquin County.	Civil.	By complaint to forever dissolve said Defendant corporation.	Leave to sue granted and bond approved May 2, 1890. Adams & Adams, attorneys for Plaintiff.	No. 8, 1890.
The People, etc., ex rel. G. A. Johnson, Attorney-General, Plaintiff, vs. Reclamation District No. 282 et al., Defendants.	Superior Court of San Joaquin County.	Civil.	By complaint to forever dissolve said Defendant corporation.	Leave to sue granted and bond approved May 2, 1890. Adams & Adams, attorneys for Plaintiff.	No. 9, 1890.
The People, etc., ex rel. Board of Supervisors of Napa County, Plaintiff, vs. Joseph Sheerer and Conrad Sheerer, Defendants.	Superior Court of Napa County.	Civil.	By complaint to forfeit Defendant's franchise.	Leave to sue granted and bond approved May 14, 1890. H. M. Barstow, attorney for Relator.	No. 10, 1890.
The People, etc., ex rel. Jacob Hoeck, Plaintiff, vs. Thomas J. Smith, Defendant.	Superior Court of Alameda County.	Civil.	By complaint to oust Defendant from the office of member of the Board of Fire Delegates, and to instate Relator therein.	Leave to sue granted and bond approved June 6, 1890. R. B. Tappan, attorney for Relator.	No. 11, 1890.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CIVIL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
The People, etc., ex rel. Orlando C. Miller, Plaintiff, vs. Common Council of the City of San Diego, Defendant.	Supreme Court of California.	Civil.	By petition for a writ of mandate to require Respondents to submit to the electors of the City of San Diego, the question whether or not Coronado Beach should be excluded therefrom.	Leave to sue granted and bond approved June 6, 1890. Harry L. Titus, attorney for Petitioner.	Peremptory writ issued as prayed for August 18, 1890.	No. 12, 1890.
The People, etc., ex rel. R. J. Tobin, Plaintiff, vs. The Omnibus Railroad and Cable Company, Defendant.	Superior Court of San Francisco.	Civil.	By complaint to require Defendant to remove obstructions and abate nuisance.	Leave to sue to be granted on filing of proper bond May 15, 1890. Thomas F. Barry, attorney for Relator.		No. 13, 1890.
The People, etc., ex rel. Placer County, Plaintiff, vs. Volcano Canyon Road Company, Defendant.	Superior Court of Placer County.	Civil.	By complaint to declare road a public highway and restrain Defendant from taking toll on, or obstructing the same.	Leave to sue granted July 2, 1890.		No. 14, 1890.
The People, etc., ex rel. Placer County, Plaintiff, vs. Stony Hill Turnpike Road Company, Defendant.	Superior Court of Placer County.	Civil.	By complaint to declare road a public highway and restrain Defendant from taking toll on, or obstructing the same.	Leave to sue granted July 2, 1890.		No. 15, 1890.

The People, etc., ex rel. J. C. Bedell, Plaintiff, vs Reclamation District No. 124 et al., Defendants.	Superior Court of Colusa County.	Civil.	By complaint to dissolve Defendant corporation and exclude Defendants from corporate rights.	Leave to sue granted and bond approved August 18, 1890. W. G. Dyas, attorney for Relator.	No. 16, 1890.
The People, etc., ex rel. J. W. Lorey, Plaintiff, vs. S. C. Clow, Defendant.	Superior Court of Placer County.	Civil.	By complaint to oust said Clow from office.	Leave to sue granted and bond approved August 30, 1890. J. E. Frewett, attorney for Relator.	No. 17, 1890.
The People, etc., ex rel. Attorney-General, Plaintiff, vs. Douglas Gunn and the City of San Diego, Defendants.	Superior Court of San Diego County.	Civil.	By complaint to oust said Gunn from office of Mayor.	Leave to sue granted and bond approved September 6, 1890. Hunsaker, Britt, & Goodrich, attorneys for Relator.	No. 18, 1890.
The People, etc., ex rel. J. M. Canty, Plaintiff, vs. J. D. Thorne, Tip-ton Lindsey, and M. W. Smith, Defendants.	Superior Court of Tulare County.	Civil.	By complaint to exclude Defendants from office, and fine each of them \$5,000.	Leave to sue granted and bond approved September 12, 1890. Brown & Daggett, attorneys for Relator.	No. 19, 1890.
The People, etc., ex rel. Waterman Field, Plaintiff, vs. The Eel River and Eureka R. R. Co. (a corporation), Defendant.	Superior Court of Humboldt County.	Civil.	By complaint to declare land a public highway, and prevent Defendant from obstructing the same.	Leave to sue granted and bond approved September 19, 1890. Coonan & Sevier, attorneys for Relator.	No. 20, 1890.
The People, etc., ex rel. S. C. Headley, Plaintiff, vs. Board of Supervisors of Los Angeles County, Defendant.	Superior Court of Los Angeles County.	Civil.	By complaint to compel Defendant to provide for and hold an election in said district, and to determine the boundaries of and name said district.	Leave to sue granted and bond approved September 20, 1890. O'Melveny & Henning, attorneys for Relator.	No. 21, 1890.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CIVIL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
The People, etc., ex rel. B. J. Ackerman, Plaintiff, vs. Mutual Endowment Association of Oakland (a corporation), Defendant.	Superior Court of San Francisco.	Civil.	By complaint to oust Defendant from its franchises, privileges, and powers, and appoint a receiver to wind up its affairs.	Leave to sue granted and bond approved September 20, 1890. Carl Spelling, attorney for Relator.	.	No. 22, 1890.
The People, etc., ex rel. B. J. Ackerman, Plaintiff, vs. Bankers and Merchants' Mutual Life Association of the United States (a corporation), Defendant.	Superior Court of San Francisco.	Civil.	By complaint to oust Defendant from its franchises, privileges, and powers, and to appoint a receiver to take charge of and wind up its affairs.	Leave to sue granted and bond approved September 20, 1890. Carl Spelling, attorney for Relator.		No. 23, 1890.
The People, etc., ex rel. Mariposa County, Petitioner, vs. George Counts, as Treasurer of Mariposa County, Respondent.	Supreme Court of California.	Civil.	By complaint to compel Respondent to sell one hundred and fifty bonds of Mariposa County.	Leave to sue granted, provided the State be put to no expense, Sept. 5, 1890. R. B. Sheldon, District Attorney, and J. W. Congdon, attorneys for Petitioner.		No. 24, 1890.
The People, etc., ex rel. Kern County, Petitioner, vs. Baker, Respondent. Huggin, Van Ness & Dibble for Petitioner.	Superior Court of San Francisco.	Civil.	By application for writ of mandate against the Treasurer of Kern County for the issuance of certain bonds.		October 18, 1889, petition filed. February 24, 1890, petition dismissed. Rehearing denied March 22, 1890.	

12414—The People, etc., ex rel. El Dorado County vs. Davidson, Defendant, Blanchard & Catlin for Defendant, Attorney-General, Bennett & Denson for Plaintiff.	Superior Court of El Dorado County.	Civil.	By complaint to declare road a public highway.	Judgment for Plaintiff.	Transcript filed November 15, 1887. Judgment affirmed May 8, 1889.	
12398—The People, etc., ex rel. El Dorado County vs. O'Keefe, Blanchard & Catlin for Defendant, Attorney-General, Bennett & Denson for Plaintiff.	Superior Court of El Dorado County.	Civil.	By complaint to declare road a public highway.	Judgment for Plaintiff.	Transcript filed October 31, 1887. Judgment affirmed May 8, 1889.	
OTHER CIVIL CASES.						
TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
12851—James C. Smith, Appellant, vs. Charles H. Keagle, as Tax Collector of San Joaquin County, Respondent. Louttit, Woods & Levensky for Appellant, Attorney-General and Ansel Smith for Respondent.	Superior Court of San Joaquin County.	Civil.	By complaint for \$300 tax paid under protest.	Complaint filed June 30, 1888. Judgment for Defendant on demurrer, August 10, 1888. Notice of appeal filed August 28, 1888.	Judgment reversed, with directions to overrule the demurrer, December 31, 1888.	The Assessor refused to deduct a mortgage to the University from the assessed value of Plaintiff's property.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CIVIL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
James Touhey, Plaintiff, vs. W. C. Hendricks and Adam Herold, as members of the State Board of Capitol Commissioners, Defendants.	Superior Court of Sacramento County.	Civil.	By complaint to restrain Defendants from contracting to pave the driveway east of the Capitol, unless in compliance with Act of 1876.	Copy of complaint received June 13, 1889. Robt. T. Devlin, attorney for Plaintiff.	Injunction denied July 31, 1889.	
20573 — May Willard, Plaintiff, vs. Superior Court of Santa Barbara County, Defendant. Beatty & Fowler for Plaintiff, Attorney-General for Defendant.	Supreme Court of California.	Civil.	By complaint for writ of mandate.		Petition filed July 25, 1889.	
12231 — The People, Plaintiff, vs. Southern Pacific Railroad Company, Defendant. Attorney-General, A. L. Rhodes, and D. M. Delmas for Plaintiff, Creed Haymond and Harvey Brown for Defendant.	Superior Court of San Francisco.	Civil.	By complaint for delinquent taxes for year 1886.	Complaint filed March 1, 1887. Demurrer to complaint sustained April 29, 1887. Judgment for Defendant May 3, 1887. Notice of appeal filed June 29, 1887.	Transcript filed. Judgment affirmed March 8, 1890.	

12257—The People, Plaintiff, vs. Central Pacific Railroad Company, Defendant. Attorney-General, A. L. Rhodes, and D. M. Delmas for Plaintiff. Creed Haymond and Harvey Brown for Defendant.	Superior Court of San Francisco.	Civil.	By complaint for delinquent taxes for year 1886.	Complaint filed March 1, 1887. Demurrer to complaint sustained April 29, 1887. Judgment for Defendant May 3, 1887. Notice of appeal filed June 29, 1887.	Transcript filed. Judgment affirmed March 8, 1890.
12258—The People, Plaintiff, vs. California Pacific R. R. Co., Defendant. Attorney-General, A. L. Rhodes, and D. M. Delmas for Plaintiff. Creed Haymond and Harvey Brown for Defendant.	Superior Court of San Francisco.	Civil.	By complaint for delinquent taxes for the year 1886.	Complaint filed March 1, 1887. Demurrer to complaint sustained April 29, 1887. Judgment for Defendant May 3, 1887. Notice of appeal filed June 29, 1887.	Transcript filed. Judgment affirmed March 8, 1890.
12260—The People, Plaintiff, vs. San Pablo and Tulare R. R. Co., Defendant. Attorney-General, A. L. Rhodes, and D. M. Delmas for Plaintiff. Creed Haymond and Harvey Brown for Defendant.	Superior Court of San Francisco.	Civil.	By complaint for delinquent taxes for year 1886.	Complaint filed March 1, 1887. Demurrer to complaint sustained April 29, 1887. Judgment for Defendant May 3, 1887. Notice of appeal filed June 29, 1887.	Transcript filed. Judgment affirmed March 8, 1890.
12259—The People, Plaintiff, vs. Northern R. R. Co., Defendant. Attorney-General, A. L. Rhodes, and D. M. Delmas for Plaintiff. Creed Haymond and Harvey Brown for Defendant.	Superior Court of San Francisco.	Civil.	By complaint for delinquent taxes for year 1886.	Complaint filed March 1, 1887. Demurrer to complaint sustained April 29, 1887. Judgment for Defendant May 3, 1887. Notice of appeal filed June 29, 1887.	Transcript filed. Judgment affirmed March 8, 1890.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CIVIL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
13271—Eliza F. McMullin, Respondent, vs. A. Leitch et al., Appellant. W. L. Dudley and J. C. Campbell for Respondent, Avery C. White and Attorney-General for Appellant.	Superior Court of San Joaquin County.	Civil.	By petition to declare road a free public highway.	Petition filed August 7, 1888. Judgment granted and judgment entered for Defendant December 24, 1888. Notice of appeal filed April 23, 1889.	Transcript filed May 29, 1889.	
13779—In the matter of the application of Geo. Lowry for a writ of review. Justin Jacobs for Petitioner, W. D. Tupper and Attorney-General for People.	Supreme Court of California.	Civil.	By petition for writ of review.		Petition filed March 24, 1890. Argued and submitted May 8, 1890.	
13647—P. A. Humbert, Petitioner, vs. John P. Dunn, Respondent. Robert Devlin for Petitioner.	Supreme Court of California.	Civil.			Petition filed January 11, 1890. Alternative writ, January 11. Demurrer, January 25, 1890. Demurrer overruled May 3, 1890.	
W. E. Van Slyke vs. Theodore Reichert, Surveyor-General of California. J. D. Bethune for Plaintiff, Attorney-General for Defendant.	Superior Court of San Bernardino County.	Civil.	By complaint for a writ of mandate compelling Reichert to approve Plaintiff's application to purchase land.	Complaint filed December 2, 1889. Judgment March 8, 1890, for Plaintiff. Notice of appeal filed March 12, 1890.	Appeal dismissed on motion of Appellant.	

3357—The Yosemite Stage and Turnpike Co., Petitioner, vs. John P. Dunn, Respondent. Lloyd & Wood for Petitioner, Attorney-General for Respondent.	Supreme Court of California.	Civil.	By complaint for a writ of mandate compelling Respondent to draw his warrant.	Transcript filed October 17, 1889. Judgment for Petitioner, March 8, 1890.	
3395—The People, etc., ex rel. Board of Trustees of California Home for Care and Training of Feeble-Minded Children, vs. John P. Dunn, Respondent. Haggin, Van Ness & Dibble for Relator, T. H. Laine for Respondent.	Supreme Court of California.	Civil.	By application for a writ of mandamus to compel Respondent to draw his warrant.	Petition filed June 21, 1889. Peremptory writ issued August 26, 1889.	The Attorney-General advised that the warrant be drawn.
13366—Proll, Petitioner, vs. John P. Dunn, Respondent. Pillsbury & Blanding for Petitioner.	Supreme Court of California.	Civil.	By petition to compel Respondent to draw his warrant.	Petition filed July 23, 1889. Argued August 10. Writ issued as prayed for August 24, 1889.	The Attorney-General advised that the warrant be drawn.
12861—Smith, Appellant, vs. Keagle, Respondent. Woods & Levinsky for Appellant. Ansel Smith for Respondent.	Superior Court of San Joaquin County.	Civil.		Transcript filed September 25, 1888. December 31, 1888, judgment reversed, with directions to overrule the demurrer.	

COPY OF ATTORNEY-GENERAL'S DOCKET OF CIVIL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
11089—The People, etc., Appellant, vs. The Dashaway Association, Respondent. McClure & Dwinell & Tilden for Respondent.	Supreme Court of California.	Civil.	By complaint to forfeit Respondent's charter.		Transcript filed June 8, 1885. January 16, 1890, argued and submitted. May 10, 1890, judgment for Defendant affirmed.	
12955—M. Prewett, Respondent, vs. Theo. Reichert, Appellant. Wallace Prewett for Respondent. Attorney-General for Appellant.	Supreme Court of California.	Civil.	By petition for writ of mandate to compel Defendant to prepare a patent.		Transcript filed November 2, 1888. March 20, 1889, appeal dismissed, the case having been settled.	
13187—The People, etc., ex rel. R. W. Waterman, Plaintiff, vs. A. C. Freeman, Defendant. H. C. Dibble for Relator.	Supreme Court of California.	Civil.	By complaint to oust Defendant from Board of State Library Trustees.		Transcript filed April 10, 1889. Judgment for Defendant affirmed August 30, 1889.	Case brought by order of the Governor.
11565—Chas. Robinson vs. John P. Dunn, Appellant. Carey & Sullivan for Respondent. Attorney-General and D. M. Delmas for Appellant.	Supreme Court of California.	Civil.	By complaint for writ of mandate to compel Defendant to draw his warrant.	Judgment for Plaintiff.	December 10, 1888, judgment reversed, with directions to dismiss the proceedings.	

CRIMINAL CASES.

TITLE OF CASE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20345—The People, etc., Respondent, vs. J. Milton Bowers, Appellant. Attorney-General for People, Colin Campbell and Fox & Kellogg for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Murder.	Information filed December 30, 1885. Verdict April 23, 1886, guilty murder first degree. Judgment June 2, 1886, death. Notice of appeal filed June 2, 1886.	Transcript filed August 20, 1887. Judgment and order affirmed June 14, 1888. Re-hearing granted. Re-argued and submitted October 1, 1888. Re-submitted December 29, 1888. Judgment and order reversed.	
20384—The People, etc., Respondent, vs. Luke Carty, Appellant. Attorney-General for People, Henry E. Highton for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Murder.	Information filed July 26, 1882. Verdict January 18, 1887, guilty of manslaughter. Judgment January 22, 1887, five years. Notice of appeal filed December 30, 1887.	Transcript filed December 30, 1887. Judgment and order reversed October 23, 1886.	
20386—The People, etc., Respondent, vs. Andrew Irwin, Appellant. Attorney-General and Montgomery & Scott for People, N. C. Briggs for Appellant.	Superior Court of San Benito County.	Criminal.	By information—Murder.	Information filed November 6, 1885. Verdict November 30, 1887, guilty murder second degree. Judgment December 19, 1887, life imprisonment. Notice of appeal filed December 27, 1887.	Transcript filed January 18, 1888. Judgment and order reversed December 12, 1888.	This case was twice argued. Dependent One failing to agree.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20412.—The People, etc., Respondent, vs. Leong Yune Sun, Appellant. Attorney-General and Robert Fernal for People, Wilson & Troutt for Appellant.	Superior Court of San Francisco.	Criminal.	By information — Assault to commit murder.	Information filed December 8, 1887. Verdict December 15, 1887, guilty as charged. Judgment January 3, 1888, ten years. Notice of appeal filed January 4, 1888.	Transcript filed March 27, 1888. Judgment and order affirmed December 28, 1888.	
20413.—The People, etc., Respondent, vs. Calvin Pratt, Appellant. Attorney-General and J. A. Hosmer for People, Henry E. Highton for Appellant.	Superior Court of San Francisco.	Criminal.	By information — Forgery.	Information filed March 4, 1886. Verdict December 16, 1886, guilty. Judgment January 12, 1887, fourteen years. Notice of appeal filed January 12, 1887.	Transcript filed March 27, 1888. Judgment and order affirmed March 7, 1889.	
20416.—The People, etc., Respondent, vs. Mary Von, Appellant. Attorney-General for People, J. T. Rogers for Appellant.	Superior Court of San Francisco.	Criminal.	By information — Murder.	Information filed July 25, 1887. Verdict October 3, 1887, guilty of murder in first degree, with life imprisonment. Judgment October 17, 1887, life imprisonment. Notice of appeal filed ---.	Transcript filed ---, 1888. Judgment and order affirmed December 29, 1888.	

20417—The People, etc., Respondent, vs. Theodore Fowler, Appellant. Attorney-General for People, John M. Lucas for Appellant.	Superior Court of San Diego County.	Criminal.	By information—Grand larceny and previous conviction of grand larceny.	Information filed July 19, 1887. Verdict February 16, 1888, guilty, and previous conviction true. Judgment February 20, 1888, ten years. Notice of appeal filed March 30, 1888.	Transcript filed March 30, 1888. Appeal dismissed on ground that Defendant had escaped from jail and would not subject himself to the orders of the Court May 8, 1888. Motion to reinstate. Cause submitted on briefs on file November 18, 1888. Motion denied.
20422—The People, etc., Respondent, vs. Joseph McGrew, Appellant. Attorney-General for People, Jackson Hatch for Appellant.	Superior Court of Shasta County.	Criminal.	By information—False imprisonment.	Information filed September 5, 1887. Verdict November 16, 1887, guilty. Judgment November 26, 1887, fine of \$125. Notice of appeal filed November 26, 1887.	Transcript filed April 12, 1888. Judgment and order affirmed December 26, 1888.
20428—The People, etc., Respondent, vs. Walter B. Todd, Appellant. Attorney-General for People, Taylor & Craig for Appellant.	Superior Court of Alameda County.	Criminal.	By indictment—Forgery.	Indictment presented and filed February 7, 1887. Verdict May 2, 1887, guilty. Judgment June 7, 1887, eight years. Notice of appeal filed April 19, 1888.	Transcript filed May 2, 1888. Judgment and order affirmed December 10, 1888.
20436—The People, etc., Respondent, vs. T. H. Eastman, Appellant. Attorney-General for People, Yell & Seawell for Appellant.	Superior Court of Mendocino County.	Criminal.	By information—Grand larceny.	Information filed March 24, 1888. Verdict April 11, 1888, guilty. Judgment, one year. Notice of appeal filed May 18, 1888.	Transcript filed May 31, 1888. Judgment and order reversed September 28, 1888.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20440—The People, etc., Respondent, vs. Henry Mahlman, Appellant. Attorney-General for People, R. Percy Wright for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Embezzlement.	Information filed July 16, 1886. Verdict December 16, 1886, guilty. Judgment February 12, 1887, one year. Notice of appeal filed February 12, 1887.	Transcript filed June 5, 1888. Stricken from calendar.	
20441—The People, etc., Respondent, vs. Frank T. Northey, Appellant. Attorney-General for People, George A. Knight for Appellant.	Superior Court of San Francisco.	Criminal.	By indictment—Attempt to bribe.	Indictment presented and filed October 21, 1887. Verdict November 3, 1887, guilty. Judgment November 21, 1887, nine years. Notice of appeal filed January 18, 1888.	Transcript filed June 5, 1888. Judgment and order affirmed December 27, 1888.	
20446—The People, etc., Respondent, vs. Mike Ahern, Appellant. Attorney-General for People, J. D. Sullivan for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Robbery and prior convictions.	Information filed December 29, 1887. Verdict February 1, 1888, guilty as charged. Judgment February 18, 1888, twenty-five years. Notice of appeal filed April 19, 1888.	Transcript filed June 16, 1888.	
20447—The People, etc., Respondent, vs. X. Dodel, Appellant. Attorney-General for People, Davis Louderback for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Assault with a deadly weapon.	Information filed December 8, 1887. Verdict February 8, 1888, guilty as charged. Judgment February 11, 1888, two years. Notice of appeal filed February 20, 1888.	Transcript filed June 16, 1888. Judgment and order reversed October 27, 1888.	

20448—The People, etc., Respondent, vs. Fong Ching, alias Pete, Appellant. Attorney-General for People, H. H. Lowenthal for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Atttempting to bribe an officer.	Information filed October 11, 1886. Verdict August 24, 1887, guilty. Judgment September 3, 1887, — years. Notice of appeal filed September 21, 1887.	Transcript filed June 16, 1887. Judgment and order reversed January 28, 1889.
20450—The People, etc., Respondent, vs. A. A. Doane, Appellant. Attorney-General for People, J. C. Black for Appellant.	Superior Court of Santa Clara County.	Criminal.	By information—Embezzlement.	Information filed December 30, 1887. Verdict April 11, 1888, guilty as charged. Judgment April 27, 1888, one year. Notice of appeal filed June 8, 1888.	Transcript filed June 18, 1888. Judgment and order affirmed December 24, 1888.
20453—The People, etc., Respondent, vs. Daniel Mahoney, Appellant. Attorney-General for People, Taylor & Craig for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Murder.	Information filed March 14, 1888. Verdict April 28, 1888, guilty manslaughter. Judgment June 4, 1888, seven years. Notice of appeal filed June 4, 1888.	Transcript filed June 25, 1888. Judgment and order affirmed December 14, 1888.
20455—The People, etc., Respondent, vs. Jules Maurin, Appellant. Attorney-General for People, Robert Ferral and G. W. McEnerney for Appellant.	Superior Court of San Francisco.	Criminal.	By information—False personation.	Information filed December 12, 1887. Verdict February 15, 1888, guilty. Judgment February 18, 1888, fine of \$3,000, or three thousand days in county jail. Notice of appeal filed February 20, 1888.	Transcript filed June 29, 1888. Judgment and order reversed December 8, 1888.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20456—The People, etc., Respondent, vs. Philip O'Brien, Appellant. Attorney-General for People, P. Reddy and W. H. Metson for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Murder.	Information filed December 8, 1887. Verdict February 3, 1888, guilty murder second degree. Judgment February 25, 1888, ten years. Notice of appeal filed February 27, 1888.	Transcript filed June 29, 1888. Judgment and order affirmed December 29, 1888.	
20459—The People, etc., Respondent, vs. — French, Appellant. Attorney-General for People, E. K. Vaughn for Appellant.	Superior Court of Alameda County.	Criminal.	By information—Burglary.	Information filed April 18, 1888. Verdict May 18, 1888, guilty of burglary first degree. Judgment May 28, 1888, —. Notice of appeal filed June 29, 1888.	Transcript filed July 17, 1888. Judgment and order affirmed October 1, 1888.	
20460—The People, etc., Respondent, vs. W. F. Rozelle, Appellant. Attorney-General for People, Hugh J. and Wm. Crawford for Appellant.	Superior Court of Los Angeles County.	Criminal.	By information—Aiding another in throwing vitriol.	Information filed June 10, 1887. Verdict August 19, 1887, guilty. Judgment October 29, 1887, nine years. Notice of appeal filed October 29, 1887.	Transcript filed July 18, 1888. Judgment and order affirmed December 31, 1888.	
20468—The People, etc., Respondent, vs. L. C. Lenon, Appellant. Attorney-General for People, Hugh J. and William Crawford for Appellant.	Superior Court of Los Angeles County.	Criminal.	By information—Rape.	Information filed —. Verdict —. Judgment —. Notice of appeal filed —.	Transcript filed August 7, 1888. Appeal dismissed October 30, 1888.	

20471.—In re Charles Fenton on habeas corpus. Attorney-General for People, W. H. Metson and P. Reddy for Petitioner.	Supreme Court of California.	Criminal.			Petition filed and writ granted August 23, 1888. Writ discharged and Petitioner remanded October 31, 1888.	
20472.—In re John W. Middleton on habeas corpus. Attorney-General and J. W. Breckinridge for People, Carroll Cook for Petitioner.	Supreme Court of California.	Criminal.			Petition filed and writ issued September 3, 1888. Petitioner discharged March 4, 1889.	
20473.—In re Charles Arros on habeas corpus. Attorney-General and John W. Breckinridge for People, Carroll Cook for Petitioner.	Supreme Court of California.	Criminal.			Petition filed and writ issued September 3, 1888. Petitioner discharged March 4, 1889.	
20483.—The People, etc., Respondent, vs. Lee Chuck, Appellant. Attorney-General for People, H. H. Lowenthal and George A. Knight for Appellant.	Superior Court of San Francisco.	Criminal.	By information — Murder.	Information filed September 10, 1886. Verdict January 26, 1888, guilty of murder in the first degree. Judgment February 23, 1888, death. Notice of appeal filed April 2, 1888.	Transcript filed September 27, 1888. Judgment and order reversed March 5, 1889.	This is the second appeal of this case.
20485.—The People, etc., Respondent, vs. B. A. Stephens, Appellant. Attorney-General for People, G. Wiley Wells and C. C. Stephens for Appellant.	Superior Court of Los Angeles County.	Criminal.	By information—Libel.	Information filed April 18, 1887. Verdict Monday, July 2, 1888, guilty, and for the People, on other pleas. Judgment August 25, 1888, Stephens fined \$350. No notice of appeal in the record.	Transcript filed September 26, 1888. Judgment and order dismissed without prejudice.	

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20486—The People, etc., Respondent, vs. William Henderson, Appellant. Attorney-General for People, John Flournoy for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Rape.	Information filed May 28, 1888. Verdict July 10, 1888, guilty. Judgment July 21, 1888, twenty years. Notice of appeal filed July 23, 1888.	Transcript filed October 9, 1888. Judgment and order affirmed.	
20487—The People, etc., Respondent, vs. William J. Henry, Appellant. Attorney-General for People, Hummelsaker, Britt & Lammie for Appellant.	Superior Court of San Diego County.	Criminal.	By information—Burglary.	Information filed May 2, 1888. Verdict September 25, 1888, guilty of burglary in first degree. Judgment October 2, 1888, five years. Notice of appeal filed October 4, 1888.	Transcript filed October 9, 1888. Judgment affirmed. Order appealed from. Dismissed December 8, 1888.	
20492—The People, etc., Respondent, vs. B. A. Stephens, Appellant. Attorney-General for People, G. Wiley Wells and C. C. Stephens for Appellant.	Superior Court of Los Angeles County.	Criminal.	By information—Libel.	Information filed April 18, 1887. Verdict July 2, 1888, guilty. Judgment August 25, 1888. Notice of appeal filed August 25, 1888.	Transcript filed October 27, 1888. Judgment and order reversed.	
20495—The People, etc., Respondent, vs. W. T. C. Elliott, Appellant. Attorney-General for People, Thomas E. Haydon and John R. Kittrell for Appellant.	Superior Court of Inyo County.	Criminal.	By information—Murder.	Information filed May 11, 1888. Verdict July 23, 1888, guilty of murder in the first degree. Judgment July 24, 1888, death. Notice of appeal filed September 12, 1888.	Transcript filed December 3, 1888. Judgment and order reversed August 31, 1889.	

20496—The People, etc., Respondent, vs. Chin Bing Quong, Appellant. Attorney-General for People, Welles Whitmore for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Assault with intent to commit murder.	Information filed July 19, 1888. Verdict August 27, 1888, guilty as charged. Judgment September 21, 1888, seven years. Notice of appeal filed October 2, 1888.	Transcript filed December 6, 1888. Judgment and order affirmed July 1, 1889.
20497—The People, etc., Respondent, vs. Seneca A. Swalm, Appellant. Attorney-General for People, C. B. Darwin for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Grand larceny.	Information filed December 8, 1887. Verdict March 23, 1888, guilty as charged. Judgment June 11, 1888, seven years. Notice of appeal filed June 11, 1888.	Transcript filed December 6, 1888. Judgment and order affirmed July 31, 1889.
20498—The People, etc., Respondent, vs. Charles O. Hill, Appellant. Attorney-General for People, John D. Whalley for Appellant.	Superior Court of San Francisco.	Criminal.	By indictment—Embezzlement.	Indictment presented and filed January 20, 1888. Verdict February 28, 1888, guilty as charged. Judgment March 3, 1888, seven years. Notice of appeal filed March 24, 1888.	Transcript filed December 18, 1888. Judgment and order —.
20499—The People, etc., Respondent, vs. Bernal Orcinus, Appellant. Attorney-General for People, J. E. Jarrett for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Assault with a deadly weapon.	Information filed July 19, 1888. Verdict August 17, 1888, guilty as charged, and for the People or on pleas of once in jeopardy. Judgment August 25, 1888, eighteen months. Notice of appeal filed September 1, 1888.	Transcript filed December 18, 1888. Judgment and order affirmed May 18, 1889.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20500—The People, etc., Respondent, vs. John A. Hartman, Appellant. Attorney-General for People, Hargis & Dible for Appellant.	Superior Court of San Francisco.	Criminal.	By indictment—Perjury.	Indictment presented and filed May 1, 1888. Verdict August 29, 1888, guilty as charged. Judgment September 22, 1888, fourteen years. Notice of appeal filed September 25, 1888.	Transcript filed December 18, 1888. Judgment and order reversed November 9, 1889.	
20501—The People, etc., Appellant, vs. W. H. Trotter, Respondent. Attorney-General for People, Henry C. Dible for Respondent.	Superior Court of San Francisco.	Criminal.	By indictment—Perjury.	Indictment presented and filed May 31, 1888. Verdict July 27, 1888, guilty as charged. Motion for new trial granted August 25, 1888. Notice of appeal filed September 15, 1888.	Transcript filed December 18, 1888. Judgment and order affirmed.	
20502—The People, etc., Respondent, vs. John O'Neil, Appellant. Attorney-General for People, Joseph H. Budd and James H. Budd for Appellant.	Superior Court of Contra Costa County.	Criminal.	By information—Murder.	Information filed July 7, 1888. Verdict September 11, 1888. Judgment October 25, 1888, life imprisonment. Notice of appeal filed October 25, 1888.	Transcript filed December 19, 1888. Judgment and order reversed March 14, 1889.	
20504—The People, etc., Respondent, vs. Robert Smith and John Mullen, Appellants. Attorney-General for People, Charles H. Hubbs for Appellants.	Superior Court of Solano County.	Criminal.	By information—Burglary.	Information filed June 30, 1888. Verdict August 16, 1888, guilty, first degree. Judgment August 20, 1888, Smith, thirteen years and ten months; Mullen, fourteen years. Notice of appeal filed August 20, 1888.	Transcript filed December 22, 1888. Judgment and order affirmed July 1, 1889.	

2508—The People, etc., Respondent, vs. J. H. Josselyn, Appellant. Attorney-General for People, David Loderback and Alex. Campbell for Appellant.	Superior Court of San Francisco.	Criminal.	By indictment—Misdemeanor (conspiracy).	Indictment filed June 10, 1887. Verdict February 18, 1888, guilty. Judgment May 16, 1888, eleven months, county jail. Notice of appeal filed May 16, 1888.	Transcript filed January 14, 1889. Judgment and order reversed.
2509—The People, etc., Respondent, vs. J. B. McDonnell, Appellant. Attorney-General for People, Chas. B. Darwin and Crittenden Thornton for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Possessing implements for counterfeiting.	Information filed December 29, 1887. Verdict August 17, 1888, guilty. Judgment September 3, 1888, ten years. Notice of appeal filed September 4, 1888.	Transcript filed January 19, 1889. Judgment and order affirmed August 31, 1889.
2512—The People, etc., Respondent, vs. George W. Stewart, Appellant. Attorney-General for People, T. J. Hart for Appellant.	Superior Court of Colusa County.	Criminal.	By information—Grand larceny.	Information filed July 25, 1888. Verdict (date not given), guilty as charged. Judgment December 12, 1888, three years. Notice of appeal filed January 10, 1889.	Transcript filed January 22, 1889. Judgment and order reversed August 3, 1889.
2515—The People, etc., Respondent, vs. Joseph Bishop, Appellant. Attorney-General for People, T. L. Carothers for Appellant.	Superior Court of Mendocino County.	Criminal.	By information—Assault with intent to commit murder.	Information filed October 9, 1888. Verdict January 12, 1889, guilty of assault with deadly weapon. Judgment January 12, 1889, two years. Notice of appeal filed February 1, 1889.	Transcript filed February 14, 1889. Judgment and order reversed October 11, 1889.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20516—The People, etc., Respondent, vs. L. C. Lenon, Appellant. Attorney-General for People, Hugh J. Crawford and Wm. Crawford for Appellant.	Superior Court of Los Angeles County.	Criminal.	By information—Rape.	Information filed February 13, 1888. Verdict April 6, 1888, guilty as charged. Judgment April 16, 1888, fourteen years. Notice of appeal filed January 25, 1889.	Transcript filed February 9, 1889. Judgment and order affirmed July 2, 1889.	
20517—The People, etc., Respondent, vs. William Bushon, Appellant. Attorney-General for People, W. B. Dillard for Appellant.	Superior Court of San Luis Obispo County.	Criminal.	By indictment—Murder.	Indictment filed October 28, 1887. Verdict August 17, 1888, guilty manslaughter. Judgment August 28, 1888, six years. Notice of appeal filed August 28, 1888.	Transcript filed February 18, 1889. Judgment and order reversed August 1, 1889.	
20518—The People, etc., Respondent, vs. Gustave Raschke, Appellant. Attorney-General for People, R. Percy Wright for Appellant.		Criminal.	By information—Grand larceny.		Transcript filed February 19, 1889. Judgment and order affirmed March 31, 1890.	
20519—The People, etc., Respondent, vs. Charles E. De Lay, Appellant. Attorney-General for People, John D. Whaley for Appellant.	Superior Court of San Francisco.	Criminal.	By indictment—Embezzlement.	Indictment filed August 27, 1887. Verdict October 19, 1887, guilty as charged. Judgment December 5, 1887, four years. Notice of appeal filed December 5, 1887.	Transcript filed February 23, 1889. Judgment and order affirmed August 1, 1889.	

20521—The People, etc., Respondent, vs. Fred. Mize and John Mize, Appellants. Attorney-General for People, R. M. Swain and J. A. Barham for Appellants.	Superior Court of Sonoma County.	Criminal.	By information—Assault with intent to commit murder.	Information filed November 5, 1888. Verdict November 14, 1888, guilty. Judgment January 3, 1889, one year. Notice of appeal filed January 21, 1889.	Transcript filed February 28, 1889. Judgment and order reversed July 31, 1889.
20522—The People, etc., Respondent, vs. Charles R. Backman, Appellant. Attorney-General for People, Carroll Cook for Appellant.	Superior Court of San Francisco.	Criminal.	By indictment—Arson.	Indictment presented and filed April 6, 1888. Verdict May 8, 1888, guilty. First degree. Judgment May 9, 1888, thirty-five years. Notice of appeal filed February 15, 1889.	Transcript filed March 6, 1889. Judgment and order affirmed March 31, 1890.
20523—The People, etc., Respondent, vs. L. C. Lenon, Appellant. Attorney-General for People, Hugh J. Crawford for Appellant.	Superior Court of Los Angeles County.	Criminal.	By information—Rape.	Order January 12, 1889, that judgment be entered nunc pro tunc. Notice of appeal filed February 25, 1889.	Transcript filed March 4, 1889. Judgment and order affirmed July 2, 1889.
20524—The People, etc., vs. Thomas Anderson, John Johnson, and John Kennealy, Appellants. Attorney-General for People, W. A. J. McDonald for Appellants.	Superior Court of San Bernardino County.	Criminal.	By information—Robbery.	Information filed January 14, 1889. Verdict January 26, 1889, guilty. Judgment January 29, 1889, Thomas Anderson, three years and three months; John Kennealy, three years and six months; John Johnson, three years. Notice of appeal filed January 29, 1889.	Transcript filed March 6, 1889. Judgment and order affirmed August 24, 1889.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20527—The People, etc., Respondent, vs. Morristoggin, Appellant. Attorney-General for People, J. A. Cooper and T. L. Carothers for Appellant.	Superior Court of Mendocino County.	Criminal.	By indictment—Grand larceny.	Information filed November 4, 1887. Pleads guilty June 7, 1888. Judgment June 8, 1888, four years. Notice of appeal filed March 6, 1889.	Transcript filed March 15, 1889. Judgment and order affirmed August 29, 1889.	
20528—The People, etc., Respondent, vs. Olsen and Drager, Appellants, Attorney-General for People, Irwin & Irwin for Olsen, G. J. Carpenter & Prentiss Carpenter for Drager.	Superior Court of El Dorado County.	Criminal.	By information—Murder.	Information filed August 6, 1888. Verdict guilty, first degree, September 9. Judgment, Olsen, death; Drager, death; October 9. Notice of appeal filed. Olsen, November 28, 1888; Drager, November 28, 1888.	Transcript filed March 13, 1889. Judgment and order affirmed August 3, 1889.	
20530—The People, etc., Respondent, vs. Juan Manchego, Appellant. Attorney-General for People, W. B. Dillard for Appellant.	Superior Court of San Luis Obispo County.	Criminal.	By information—Assault with intent to commit rape.	Information filed August 6, 1888. Verdict February 28, 1889, guilty of simple assault. Judgment March 2, 1889, fine \$300, or imprisonment at rate of one day for \$1. Notice of appeal filed March 4, 1889.	Transcript filed March 20, 1889. Judgment and order affirmed August 31, 1889.	

20537—The People, etc., Respondent, vs. James McKenna, Appellant. Attorney-General for People, Wm. Shipsey for Appellant.	Superior Court of San Luis Obispo County.	Criminal.	By information—Obtaining property by false pretenses.	Information filed December 16, 1888. Verdict February 27, 1889, guilty, recommend to mercy. Judgment March 4, 1889, five days, and fine of \$300; if not paid, imprisonment at rate of one day per \$1. Notice of appeal filed March 4, 1889.	Transcript filed April 2, 1889. Judgment and order reversed November 5, 1889.
20538—The People, etc., Respondent, vs. Thos. McNabb, Appellant. Attorney-General for People, Wm. G. Murphy and M. C. Barney for Appellant.	Superior Court of Yuba County.	Criminal.	By information—Murder.	Information filed June 25, 1888. Verdict July 20, manslaughter. Judgment July 28, seven years. Notice of appeal filed August 3, 1888.	Transcript filed March 30, 1889. Judgment and order affirmed June 1, 1889.
20540—The People, etc., Respondent, vs. J. P. Carroll, Appellant. Attorney-General for People, E. D. Edwards and G. G. Goucher for Appellant.	Superior Court of Fresno County.	Criminal.	By information—Gambling.	Information filed November 7, 1887. Verdict January 23, 1888, guilty. Judgment March 19, 1888, fine of \$200, or one day for each dollar. Notice of appeal filed April 3, 1888.	Transcript filed April 6, 1889. Judgment and order reversed August 2, 1889.
20541—The People, etc., Respondent, vs. Joseph Redman, Appellant. Attorney-General for People, Thos. Rhodes and J. W. Ahren for Appellant.	Superior Court of Kern County.	Criminal.	By information—Burglary.	Information filed January 11, 1889. Verdict February 2, 1889, guilty, first degree. Judgment February 14, 1889, one year. Notice of appeal filed March 4, 1889.	Transcript filed April 8, 1889. Judgment and order reversed.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20542—Ex parte Neustadt on habeas corpus. Attorney-General for People, Carroll Cook for Petitioner.	Supreme Court of California.				Petition filed and writ issued April 19, 1889. Petitioner remanded May 20, 1889.	
20543—The People, etc., Respondent, vs. A. P. Tonnelli, Appellant. Attorney-General for People, H. H. Davis, Ash & Mathews for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Extortion.	Information filed September 19, 1888. Verdict January 23, 1889, guilty. Judgment February 7, 1889, six months. Notice of appeal filed February 7, 1889.	Transcript filed April 23, 1889. Judgment and order affirmed November 23, 1889.	
20544—The People, etc., Respondent, vs. Gerónimo Buelna, Appellant. Attorney-General for People, Graves, Turner & Graves for Appellant.	Superior Court of San Luis Obispo County.	Criminal.	By information—Grand larceny.	Information filed July 29, 1886. Verdict July 21, 1887, guilty. Judgment July 25, 1887, four years. Notice of appeal filed —.	Transcript filed April 29, 1889. Judgment and order affirmed October 11, 1889.	
20545—The People, etc., Respondent, vs. John Dunne, Appellant. Attorney-General for People, James F. Farragher for Appellant.	Superior Court of Siskiyou County.	Criminal.	By information—Murder.	Information filed November 30, 1887. Verdict December 21, 1887, guilty of murder, second degree. Judgment January 25, 1888, fifteen years. Notice of appeal filed January 30, 1888.	Transcript filed April 27, 1889. Judgment and order affirmed July 24, 1889.	

20546—The People, etc., Appellant, vs. William M. Savercool, Respondent. Attorney-General for People, W. W. Kellogg for Respondent.	Superior Court of Plumas County.	Criminal.	By information — Assault with a deadly weapon.	Information filed March 9, 1889. April 8, 1889, demurrer sustained. Notice of appeal filed April 8, 1889.	Transcript filed April 29, 1889. Judgment and order reversed December 5, 1889.
20549—The People, etc., Respondent, vs. Thos. Bowman, Appellant. Attorney-General for People, G. D. Murray and T. H. Selvage for Appellant.	Superior Court of Humboldt County.	Criminal.	By information — Murder.	Information filed December 10, 1888. Verdict January 26, 1889, guilty. Judgment February 26, 1889, life imprisonment. Notice of appeal filed March 2, 1889.	Transcript filed May 16, 1889. Judgment and order affirmed December 2, 1889.
20551—The People, etc., Respondent, vs. Sylvester Fitzpatrick, Appellant. Attorney-General for People.		Criminal.			Transcript filed May 13, 1889. Judgment and order affirmed September 13, 1889.
20554—The People, etc., Respondent, vs. William Lanagan, Appellant. Attorney-General for People, H. T. Gage and John Roberts for Appellant.	Superior Court of Los Angeles County.	Criminal.	By information — Murder.	Information filed November 17, 1888. Verdict January 28, 1889, guilty of manslaughter. Judgment February 11, 1889, eight years. Notice of appeal March 26, 1889.	Transcript filed May 22, 1889. Judgment and order reversed October 24, 1889.
20555—The People, etc., Respondent, vs. John Ryan, Appellant. Attorney-General for People, Weed S. Chelf for Appellant.	Superior Court of Los Angeles County.	Criminal.	By information — Burglary.	Information filed March 9, 1889. Verdict April 18, 1889, guilty, first degree. Judgment April 22, 1889, three years. Notice of appeal filed April 25, 1889.	Transcript filed May 25, 1889. Judgment and order reversed January 27, 1890.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20558—The People, etc., Respondent, vs. W. H. Stone, Appellant. Attorney-General for People, Montgomery & Scott, W. H. Webb, and T. H. Laine for Appellant.	Superior Court of San Benito County.	Criminal.	By information—Murder.	Information filed August 15, 1888. Verdict March 11, 1889, guilty, second degree. Judgment April 29, 1889, ten years. Notice of appeal filed April 29, 1889.	Transcript filed June 5, 1889. Judgment and order reversed December 12, 1889.	
20559—The People, etc., Respondent, vs. Harry Forney, Appellant. Attorney-General for People, Carroll Cook for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Assault with a deadly weapon.	Information filed September 27, 1888. Verdict November 1, 1888. Judgment November 5, 1888, fifteen months. Notice of appeal filed December 10, 1888.	Transcript filed June 7, 1889. Judgment and order affirmed October 11, 1889.	
20563—Ex parte Christianson on habeas corpus. Attorney-General for People, Alfred Clark for Petitioner.	Supreme Court of California.	Criminal.			Petition filed and writ issued June 28, 1889. Petitioner remanded August 2, 1890.	
20567—The People, etc., Respondent, vs. Henry Mahlman, Appellant. Attorney-General for People, R. Percy Wright for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Embezzlement.	Information filed July 16, 1886. Verdict, December 16, 1886, guilty. Judgment February 12, 1887, one year. Notice of appeal filed February 12, 1887.	Transcript filed July 13, 1889. Judgment and order affirmed January 27, 1890.	

20569—The People, etc., Appellant, vs. K. C. Naylor, Respondent. Attorney-General for People, Luce, McDonald & Torrance and Geo. W. Hardacre for Respondent.	Superior Court of San Diego County.	Criminal.	By information—Perjury.	Information filed April 29, 1889. Denurrer to complaint filed May 3, 1889. Denurrer sustained May 22, 1889. Notice of appeal filed May 25, 1889.	Transcript filed July 15, 1889. Judgment and order reversed January 27, 1890.
20570—The People, etc., Respondent, vs. Salvatore Smario, Appellant. Attorney-General for People, E. R. Chase and A. D. Spivato for Appellant.	Superior Court of Contra Costa County.	Criminal.	By information—Murder.	Information filed March 25, 1889. Verdict April 27, 1889, guilty manslaughter. Judgment May 20, 1889, ten years. Notice of appeal filed May 21, 1889.	Transcript filed July 15, 1889. Judgment and order affirmed June 12, 1890.
20572—The People, etc., Respondent, vs. Robert Levine, Appellant. Attorney-General for People, Peyton & Grant and Max Lowenthal for Appellant.	Superior Court of Los Angeles County.	Criminal.	By information—Arson.	Information filed February 23, 1889. Verdict May 2, 1889, guilty, first degree. Judgment May 25, 1889, twenty-five years. Notice of appeal filed May 31, 1889.	Transcript filed July 19, 1889. Judgment and order affirmed December 5, 1889.
20576—The People, etc., Respondent, vs. Henry Russell, Appellant. Attorney-General for People, Ira C. Jenks for Appellant.	Superior Court of Sonoma County.	Criminal.	By information—Arson.	Information filed May 29, 1889. Verdict June 13, 1889, guilty, first degree. Judgment July 1, 1889, ten years. Notice of appeal filed July 6, 1889.	Transcript filed July 26, 1889. Judgment and order affirmed December 4, 1889.
20577—The People, etc., Respondent, vs. Nellie Woods, Appellant. Attorney-General for People, Eugene N. Deuprey for Appellant.	Superior Court of San Francisco.	Criminal.	By indictment—Grand larceny.	Indictment filed October 11, 1888. Verdict November 13, 1888, guilty. Judgment May 31, 1889, four years. Notice of appeal filed May 28, 1889.	Transcript filed July 26, 1889. Judgment and order affirmed.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20579.—The People, etc., Respondent, vs. Lum Yit, Appellant. Attorney-General for People, Thos. D. Riordan for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Robbery.	Information filed March 6, 1889. Verdict March 23, 1889, guilty. Notice of appeal filed July 15, 1889.	Transcript filed July 20, 1889. Judgment and order affirmed February 10, 1890.	
20582.—The People, etc., Respondent, vs. William Boling, Appellant. Attorney-General for People, Ernest Graves for Appellant.	Superior Court of San Luis Obispo County.	Criminal.	By information—Murder.	Information filed January 9, 1889. Verdict April 4, 1889, guilty manslaughter. Judgment April 15, 1889, ten years. Notice of appeal filed June 11, 1889.	Transcript filed August 5, 1889. Judgment and order affirmed March 3, 1890.	
20583.—The People, etc., Respondent, vs. A. W. McConnell, Appellant. Attorney-General for People, Hugh J. & William Crawford for Appellant.	Superior Court of Los Angeles County.	Criminal.	By information—Burglary.	Information filed May 15, 1889. Verdict June 13, 1889, guilty, first degree. Judgment June 15, 1889, five years. Notice of appeal filed June 22, 1889.	Transcript filed July 30, 1889. Judgment and order affirmed January 27, 1890.	
20585.—The People, etc., Respondent, vs. J. G. Cline, Appellant. Attorney-General for People, W. D. Grady for Appellant.	Superior Court of Fresno County.	Criminal.	By information—Grand larceny.	Information filed April 22, 1889. Verdict October 20, 1888, guilty. Judgment October 22, 1888, two years. Notice of appeal filed November 27, 1888.	Transcript filed August 8, 1889. Judgment and order affirmed March 3, 1890.	

20588—The People, etc., Respondent, vs. Jack Lawrence, Appellant. Attorney-General for People, J. D. Sullivan and Alfred Clark for Appellant.	Superior Court of San Francisco.	Criminal.	By indictment—Gaming.	Indictment filed April 23, 1888. Verdict August 14, 1888, guilty. Judgment August 24, 1888, \$200 fine, or imprisonment not to exceed one year. Notice of appeal filed August 28, 1888.	Transcript filed August 21, 1889. Judgment and order reversed December 24, 1889.
20589—Ex parte Wadleigh on habeas corpus. Attorney-General for People, Carroll Cook for Petitioner.	Supreme Court of California.	Criminal.			Petition filed and writ issued August 21, 1889. Argued September 20, 1889. Petitioner discharged January 11, 1890.
20590—The People, etc., Respondent, vs. Alvin McClelland, Appellant. Attorney-General for People, J. B. Dunlap for Appellant.	Superior Court of Los Angeles County.	Criminal.	By information—Burglary.	Information filed June 10, 1889. Verdict June 21, 1889, guilty, second degree. Judgment June 24, 1889, two years. Notice of appeal filed July 16, 1889.	Transcript filed August 14, 1889. Stricken from calendar.
20591—The People, etc., Respondent, vs. J. Chas. Green, Appellant. Attorney-General for People, J. M. Lesser for Appellant.	Superior Court of San Francisco.	Criminal.	By indictment—Labeled.	Indictment filed November 15, 1888. Verdict May 24, 1889, guilty. Judgment June 3, 1889, six months in county jail. Notice of appeal filed June 6, 1889.	Transcript filed August 31, 1889. Judgment and order affirmed.
20592—The People, etc., Respondent, vs. Geo. Rogers, Appellant. Attorney-General for People, W. J. Herrin for Appellant.	Superior Court of Butte County.	Criminal.	By information—Burglary.	Information filed November 1, 1888. Verdict November 16, 1888, guilty, first degree. Judgment November 17, 1888, twelve years. Notice of appeal filed August 21, 1889.	Transcript filed August 28, 1889. Judgment and order affirmed November 18, 1889.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20593—The People, etc., Respondent, vs. H. Miller, Appellant. Attorney-General for People, W. H. C. Ecker and N. H. Dodson for Appellant.	Superior Court of San Diego County.	Criminal.	By information—Conspiracy.	Information filed May 13, 1889. Verdict May 21, 1889, guilty. Judgment May 25, 1889, one year in county jail. Notice of appeal filed August 14, 1889.	Transcript filed August 28, 1889. Judgment and order reversed December 15, 1889.	
20596—The People, etc., Respondent, vs. Oscar Beaver, Appellant. Attorney-General for People, Oregon Sanders and Chas. G. Lamerson for Appellant.	Superior Court of Fresno County.	Criminal.	By indictment—Murder.	Indictment filed November 21, 1888. Verdict February 26, 1889, guilty manslaughter. Judgment February 28, 1889, one year. Notice of appeal filed February 28, 1889.	Transcript filed September 3, 1889. Judgment and order affirmed March 8, 1890.	
20597—The People, etc., Respondent, vs. William Keeley, Appellant. Attorney-General for People, Clark & Aram for Appellant.	Superior Court of Yolo County.	Criminal.	By information—Malicious mischief.	Information filed March 28, 1889. Verdict May 23, 1889, guilty. Judgment June 3, 1889, two years. Notice of appeal filed August 23, 1889.	Transcript filed September 19, 1889. Judgment and order affirmed November 19, 1889.	
20598—The People, etc., Respondent, vs. Henry Mullings, Appellant. Attorney-General for People, W. J. Herrin and M. C. Barney for Appellant.	Superior Court of Butte County.	Criminal.	By information—Murder.	Information filed May 2, 1889. Verdict June 21, 1889, guilty, first degree. Judgment July 1, 1889, for life. Notice of appeal filed July 3, 1889.	Transcript filed September 13, 1889. Judgment and order reversed February 12, 1890.	

20599—Ex parte Turner on habeas corpus. Attorney-General for People, Spencer & Baker for Petitioner.	Superior Court of Sacramento County.	Criminal.			Petition filed and writ issued September 21, 1889. Petitioner remanded.
20601—The People, etc., Respondent, vs. Wong Ah Hing, Appellant. Attorney-General for People, Lincoln E. Savage for Appellant.	Superior Court of San Francisco.	Criminal.	By indictment—Murder.	Indictment filed April 26, 1889. Verdict June 26, 1889, guilty, first degree. Judgment July 13, 1889, death. Notice of appeal filed September 4, 1889.	Transcript filed September 23, 1889. Judgment and order affirmed.
20602—Ex parte Neustadt on habeas corpus. Attorney-General for People, Eugene N. Deuprey for Petitioner.		Criminal.			Petition filed and writ issued September 25, 1889. Argued October 4, 1889. Petitioner discharged December 30, 1889.
20608—The People, etc., Respondent, vs. Frank Burns, Appellant. Attorney-General for People, M. T. Dooling for Appellant.	Superior Court of San Benito County.	Criminal.	By information—Grand larceny.	Information filed July 22, 1889. Verdict August 26, 1889, guilty, for People on other charges. Judgment September 2, 1889, one year. Notice of appeal filed September 4, 1889.	Transcript filed October 2, 1889. Judgment and order affirmed.
20609—The People, etc., Respondent, vs. Simon Hamberg, Appellant. Attorney-General for People, Eugene N. Deuprey for Appellant.	Superior Court of San Francisco.	Criminal.	By indictment—Obtaining money by false pretenses.	Indictment January 6, 1888. Verdict March 4, 1888, guilty on the charge, for People. Judgment May 19, 1888, county jail one year, and \$19,000 fine, or one day for each dollar. Notice of appeal filed August 3, 1888.	Transcript filed October 2, 1889. Judgment and order affirmed June 10, 1890.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20610—The People, etc., Respondent, vs. Frank Toal, Appellant. Attorney-General for People, Wm. T. Williams and Horace Bell for Appellant.	Superior Court of Los Angeles County.	Criminal.	By information — Assault with intent to commit murder.	Information filed May 20, 1889. Verdict July 16, 1889, guilty. Judgment July 22, 1889, ten years. Notice of appeal filed August 14, 1889.	Transcript filed October 1, 1889. Judgment and order reversed February 1, 1890. Rehearing granted. Judgment and order of lower Court reversed August 4, 1890.	
20611—The People, etc., Respondent, vs. James Ferry, Appellant. Attorney-General for People, John Flournoy for Appellant.	Superior Court of San Francisco.	Criminal.	By information — Robbery.	Information filed August 8, 1889. Verdict August 15, 1889, guilty. Judgment August 23, 1889, three years. Notice of appeal filed September 2, 1889.	Transcript filed October 8, 1889. Judgment and order reversed May 3, 1890.	
20606—Ex parte Miller on habeas corpus. Mahon, Phipps, and Attorney-General for People, M. C. Barney and A. L. Hart for Petitioner.	Supreme Court of California.	Criminal.			Petition filed and writ issued September 25, 1889. Argued November 12, 1889. Petitioner remanded January 2, 1890.	
20613—The People, etc., Respondent, vs. T. M. Mauritzen, Appellant. Attorney-General for People, E. D. Ham for Appellant.	Superior Court of Napa County.	Criminal.	By information — Obtaining property by false pretenses.	Information filed July 25, 1889. Verdict September 18, 1889, guilty. Judgment October 2, 1889, one year. Notice of appeal filed October 7, 1889.	Transcript filed October 26, 1889. Judgment and order reversed May 3, 1890.	

20614—The People, etc., Respondent, vs. Carl Andrus Lundquist, Appellant. Attorney-General for People, Jolin Flournoy for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Murder.	Information filed February 13, 1888. Verdict March 8, 1889, guilty, second degree. Judgment March 16, 1889, thirty-four years. Notice of appeal filed March 26, 1889.	Transcript filed October 29, 1889. Judgment and order reversed May 3, 1890.
20617—The People, etc., Respondent, vs. Choy Ah Sing, Appellant. Attorney-General for People, James F. Smith and Thomas D. Riordan for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Assault with a deadly weapon.	Information filed April 18, 1889. Verdict September 6, 1889, guilty. Judgment September 28, 1889, two years. Notice of appeal filed October 3, 1889.	Transcript filed November 13, 1889. Judgment and order reversed.
20618—The People, etc., Respondent, vs. John Sansome, Appellant. Pillsbury & Blanding and Attorney-General for People, L. L. Chamberlain for Appellant.	Superior Court of Placer County.	Criminal.	By indictment—Robbery.	Information filed October 1, 1887. Verdict February 9, 1888, guilty. Judgment March 6, 1888, life imprisonment. Notice of appeal filed April 14, 1888.	Transcript filed November 13, 1889. Judgment and order reversed June 10, 1890.
20621—The People, etc., Appellant, vs. Frank E. Rose, Respondent. Attorney-General for People, S. M. White and Bleeker & Barham for Respondent.	Superior Court of Los Angeles County.	Criminal.	By information—Defrauding by bunco game.	Information filed April 22, 1889. Verdict August 10, 1889, guilty. New trial granted September 2, 1889. Notice of appeal filed September 4, 1889.	Transcript filed November 25, 1889. Judgment and order affirmed August 28, 1890.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20625—The People, etc., Respondent, vs. Andrew Clark, Appellant. Attorney-General for People, T. L. Carothers and Barclay Henley for Appellant.	Superior Court of Mendocino County.	Criminal.	By information—Murder.	Information filed June 20, 1889. Verdict October 19, 1889, guilty, second degree. Judgment October 22, 1889, fifteen years. Notice of appeal filed December 4, 1889.	Transcript filed December 13, 1889. Judgment and order affirmed June 17, 1890.	
20626—The People, etc., Respondent, vs. Alessandro Alselmi, Appellant. Attorney-General for People, Wm. P. Veuve and B. E. Bennett for Appellant.	Superior Court of Santa Clara County.	Criminal.	By information—Man-slaughter.	Information filed August 8, 1889. Verdict September 4, 1889, guilty. Judgment September 20, 1889, ten years. Notice of appeal filed October 17, 1889.	Transcript filed December 5, 1889. Judgment and order affirmed September 3, 1890.	
20627—The People, etc., Respondent, vs. Harry Williams, Appellant. Attorney-General for People, Hugh J. & Wm. Crawford for Appellant.	Superior Court of Los Angeles County.	Criminal.	By information—Robbery.	Information filed August 23, 1889. Verdict October 10, 1889, guilty. Judgment October 15, 1889, ten years. Notice of appeal filed November 22, 1889.	Transcript filed December 7, 1889. Judgment and order affirmed June 24, 1890.	
20628—The People, etc., Respondent, vs. Geo. Nelson, Appellant. Attorney-General for People, W. A. Anderson and J. C. Tubbs for Appellant.	Superior Court of Sacramento County.	Criminal.	By information—Robbery.	Information filed July 11, 1889. Verdict August 17, 1889, guilty. Judgment October 11, 1889, ten years. Notice of appeal filed November 23, 1889.	Transcript filed December 12, 1889.	

20629.—The People, etc., Respondent, vs. Chas. McLean, Appellant. Attorney-General for People, T. H. Laine for Appellant.	Superior Court of Santa Clara County.	Criminal.	By information—Arson, second degree.	Information filed September 12, 1889. Verdict October 8, 1889, guilty, second degree. Judgment October 22, 1889, four years. Notice of appeal filed October 26, 1889.	Transcript filed December 14, 1889. Judgment and order affirmed June 11, 1890.
20633.—The People, etc., Respondent, vs. John Thompson, Appellant. Attorney-General for People, L. V. Hitchcock and R. E. Ragland for Appellant.	Superior Court of Tehama County.	Criminal.	By information—Robbery.	Information filed October 23, 1889. Verdict November 23, 1889, guilty. Judgment November 27, 1889, one year. Notice of appeal filed December 2, 1889.	Transcript filed December 24, 1889. Judgment and order reversed June 23, 1890.
20634.—The People, etc., Respondent, vs. J. W. Murray, Appellant. Attorney-General for People, Hunsaker & Britt for Appellant.	Superior Court of San Diego County.	Criminal.	By information—Murder.	Information filed August 5, 1889. Verdict October 24, 1889, guilty, first degree. Judgment November 11, 1889, death. Notice of appeal filed November 29, 1889.	Transcript filed January 2, 1890. Judgment and order affirmed August 11, 1890.
20635.—Ex parte Jacob Rosenheim et al., on habeas corpus. Attorney-General for People, George A. Knight and Chas. J. Heggerty for Petitioner.	Supreme Court of California.	Criminal.			Petition filed and writ issued January 2, 1890. Petitioner discharged March 6, 1890.
20637.—The People etc., Appellant, vs. Wellington Stewart, Respondent. Attorney-General for People, William Darby for Respondent.	Superior Court of San Diego County.	Criminal.	By information—Rape.	Information filed September 18, 1889. Denurrer sustained November 5, 1889. Notice of appeal filed December 11, 1889.	Transcript filed January 4, 1890. Judgment and order affirmed.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20638—The People, etc., Appellant, vs. M. Carey Harpell, Respondent. Attorney-General for People, J. M. Lucas and W. R. Guy for Respondent.	Superior Court of San Diego County.	Criminal.	By indictment—Fornery.	Indictment filed October 15, 1889. Demurrer sustained October 22, 1889. Notice of appeal filed December 11, 1889.	Transcript filed January 4, 1890. Judgment and order reversed June 14, 1890.	
20639—The People, etc., Respondent, vs. F. P. Ward, Appellant. Attorney-General for People, Spencer & McEnerney for Appellant.	Superior Court of Solano County.	Criminal.	By indictment—Willful misconduct in office.	Indictment filed May 1, 1889. Verdict May 21, 1889, guilty. Judgment June 22, 1889, removed from office. Notice of appeal filed December 12, 1889.	Transcript filed January 6, 1890.	
20640—The People, etc., Respondent, vs. John Hansen, Appellant. Attorney-General for People, Edgar D. Peixotto for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Grand larceny.	Information filed November 14, 1889. Verdict December 3, 1889, guilty. Judgment December 7, 1889, three years. Notice of appeal filed December 10, 1889.	Transcript filed January 7, 1890. Judgment and order affirmed June 6, 1890.	
20642—The People, etc., Respondent, vs. E. E. Howard, Appellant. Attorney-General for People, Wright & Hansen and L. J. Maddux for Appellant.	Superior Court of Stanislaus County.	Criminal.	By information—Assault with a deadly weapon.	Information filed July 22, 1889. Verdict September 29, 1889, guilty. Judgment October 5, 1889, fine \$500, or one day for each dollar. Notice of appeal filed October 5, 1889.	Transcript filed January 9, 1890.	

20644—The People, etc., Appellant, vs. Charles Dickinson, Respondent. Attorney-General for People, E. Swinford for Respondent.	Superior Court of Colusa County.	Criminal.	By information—Grand larceny.	Information filed October 8, 1889. Verdict November 6, 1889, not guilty. Notice of appeal filed December 24, 1889.	Transcript filed January 8, 1890. Judgment and order affirmed.
20645—The People, etc., Respondent, vs. Ah Own, Appellant. Attorney-General for People, A. L. Hart for Appellant.	Superior Court of Sacramento County.	Criminal.	By information—Gambling.	Information filed March 20, 1888. Verdict July 3, 1888, guilty. Judgment September 24, 1888, fine of \$200, or imprisonment not to exceed one year. Notice of appeal filed September 27, 1888.	Transcript filed January 10, 1890.
20646—The People, etc., Respondent, vs. Horace C. Adams, Appellant. Attorney-General for People, Hargrave & Bleisoe and Harris & Gregg for Appellant.	Superior Court of San Bernardino County.	Criminal.	By information—Murder.	Information filed August 22, 1889. Verdict September 22, 1889, guilty of manslaughter. Judgment September 28, 1889, seven years. Notice of appeal filed September 28, 1889.	Transcript filed January 17, 1890. Judgment and order reversed August 4, 1890.
20648—The People, etc., Respondent, vs. Tarn Poi, Appellant. Attorney-General for People, D. M. Delmas for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Murder.	Information filed August 8, 1889. Verdict September 17, 1889, guilty, first degree. Judgment November 11, 1889, death. Notice of appeal filed December 30, 1889.	Transcript filed January 25, 1890.
20650—The People, etc., Respondent, vs. Amelia Christensen, Appellant. Attorney-General for People, P. F. Dunne for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Grand larceny.	Information filed May 10, 1889. Verdict October 10, 1889, guilty. Judgment November 11, 1889, one year. Notice of appeal filed November 16, 1889.	Transcript filed February 1, 1890.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20651.—Ex parte Modesta Avila on habeas corpus. Attorney-General for People, Geo. Hayford for Petitioner.	Supreme Court of California.	Criminal.			Petition filed and writ issued. Petitioner remanded.	
20653.—The People, etc., Respondent, vs. Hong Tong, Appellant. Attorney-General for People, Brunson, Wilson & Lamme for Appellant.	Superior Court of Los Angeles County.	Criminal.	By information—Robbery.	Information filed April 2, 1889. Verdict November 15, 1889, guilty. Judgment November 25, 1889, three years. Notice of appeal filed December 19, 1889.	Transcript filed January 31, 1890. Judgment and order reversed August 1, 1890.	
20655.—The People, etc., Respondent, vs. Wellington Stewart, Appellant. Attorney-General for People, William Darby for Appellant.	Superior Court of San Diego County.	Criminal.	By indictment—Assault with intent to commit rape.	Indictment filed September 18, 1889. Verdict November 8, 1889, guilty. Judgment December 14, 1889, fourteen years. Notice of appeal filed December 17, 1889.	Transcript filed February 6, 1890. Judgment and order reversed August 1, 1890.	
20657.—The People, etc., Appellant, vs. P. J. Ayihens, Respondent. Attorney-General for People, William Shipsey and Graves, Turner & Graves for Respondent.	Superior Court of San Luis Obispo County.	Criminal.	By information—Obtaining money under false pretenses.	Information filed October 17, 1889. Denarrer sustained December 9, 1889. Notice of appeal filed December 17, 1889.	Transcript filed February 10, 1890. Judgment and order affirmed July 30, 1890.	

20658—The People, etc., Respondent, vs. Chun Heong. Appellant. Attorney-General for People, Lyman D. Mowry for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Murder.	Information filed June 13, 1889. Verdict August 21, 1889, guilty, first degree. Judgment November 2, 1889, for life. Notice of appeal filed November 13, 1889.	Transcript filed February 12, 1890.
20659—The People, etc., Respondent, vs. John McNulty, Appellant. Attorney-General for People, Wilson & Trout for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Murder.	Information filed April 26, 1888. Verdict August 6, 1888, guilty, first degree. Judgment August 25, 1888, death. Notice of appeal filed November 19, 1888.	Transcript filed February 21, 1890.
20661—The People, etc., Respondent, vs. Chew Sing Wing, Appellant. Attorney-General for People, J. N. E. Wilson and T. D. Riordan for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Murder.	Information filed September 13, 1889. Verdict October 26, 1889, guilty, first degree. Judgment December 9, 1889, for life. Notice of appeal filed December 13, 1889.	Transcript filed February 24, 1890.
20662—Ex parte A. W. McConnell on habeas corpus. Attorney-General for People, Hugh J. Crawford for Petitioner.	Supreme Court of California.	Criminal.			Petition filed and writ issued February 25, 1890.
20663—The People, etc., Respondent, vs. Kate Bell, Appellant. Attorney-General for People, J. N. E. Wilson for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Perjury.	Information filed June 14, 1889. Verdict October 9, 1889, guilty. Judgment October 19, 1889, four years. Notice of appeal filed November 19, 1889.	Transcript filed February 26, 1890. Judgment and order affirmed.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20664—The People, etc., Respondent, vs. Lee Fook, Appellant. Attorney-General for People, Hugh J. and Wm. Crawford for Appellant.	Superior Court of Los Angeles County.	Criminal.	By information—Assault with intent to commit murder.	Information filed September 12, 1889. Verdict October 15, 1889, guilty of assault with a deadly weapon. Judgment October 18, 1889, two years. Notice of appeal filed January 20, 1890.	Transcript filed February 24, 1890. Judgment and order affirmed August 4, 1890.	
20665—The People, etc., Respondent, vs. Benjamin Tiley, Appellant. Attorney-General for People, Peck & Taylor for Appellant.	Superior Court of San Bernardino County.	Criminal.	By information—Burning insured property.	Information filed August 16, 1889. Verdict October 17, 1889, guilty. Judgment October 21, 1889, eight years. Notice of appeal filed October 21, 1889.	Transcript filed February 26, 1890. Judgment and order reversed July 8, 1890.	
20667—The People, etc., Respondent, vs. Chas. Turner, Appellant, Attorney-General for People, Spencer & Raker for Appellant.	Superior Court of Modoc County.	Criminal.	By information—Murder.	Information filed April 4, 1889. Verdict April 16, 1889, guilty of manslaughter. Judgment April 17, 1889, ten years. Notice of appeal filed December 27, 1889.	Transcript filed March 5, 1890.	
20668—The People, etc., Respondent, vs. Chum Yook, Appellant. Attorney-General for People, Barclay Henley and Chas. B. Darwin for Appellant.	Superior Court of San Francisco.	Criminal.	By indictment—Perjury.	Indictment filed February 15, 1888. Verdict April 15, 1889, guilty. Judgment June 29, 1889, ten years. Notice of appeal filed July 20, 1889.	Transcript filed March 14, 1890.	

20671—The People, etc., Respondent, vs. J. H. Neyce, Appellant. Attorney-General for People, Geo. Pearce and J. C. Sims for Appellant.	Superior Court of Sonoma County.	Criminal.	By information—Embezzlement.	Information filed December 24, 1889. Verdict February 4, 1890, guilty. Judgment February 14, 1890, two years. Notice of appeal filed February 26, 1890.	Transcript filed March 20, 1890.
20672—The People, etc., Respondent, vs. John Murray, Appellant. Attorney-General for People, P. Reddy for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Robbery.	Information filed December 9, 1889. Verdict February 6, 1890, guilty. Judgment February 14, 1890, five years. Notice of appeal February 14, 1890.	Transcript filed March 21, 1890.
20674—The People, etc., Respondent, vs. Martin Hannon, Appellant. Attorney-General for People, Carson & Gibbons for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Burglary.	Information filed January 4, 1890. Verdict January 28, 1890, guilty, first degree. Judgment March 1, 1890, six years. Notice of appeal filed March 1, 1890.	Transcript filed March 31, 1890.
20675—The People, etc., Respondent, vs. Calvin Arras, Appellant. Attorney-General for People, Thomas & Hurst for Appellant.	Superior Court of Yolo County.	Criminal.	By information—Larceny.	Information filed December 5, 1889. Verdict February 25, 1890, guilty. Judgment March 8, 1890, four years. Notice of appeal filed March 11, 1890.	Transcript filed March 25, 1890.
20678—The People, etc., Respondent, vs. George Ross, Appellant. Attorney-General for People, A. V. Scanlan for Appellant.	Superior Court of San Joaquin County.	Criminal.	By information—Robbery.	Information filed February 4, 1890. Verdict February 14, 1890, guilty. Judgment February 25, 1890, three years and six months. Notice of appeal filed March 19, 1890.	Transcript filed April 14, 1890. Judgment and order affirmed August 6, 1890.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20679—The People, etc., Respondent, vs. James M. Eubanks, Appellant. D. W. Burchard and Attorney-General for People, H. V. Morehouse and Hiram D. Tuttle for Appellant.	Superior Court of Santa Clara County.	Criminal.	By information—Murder.	Information filed January 3, 1890. Verdict March 12, 1890, guilty, first degree. Judgment March 21, 1890, death. Notice of appeal filed April 3, 1890.	Transcript filed April 16, 1890.	
20682—The People, etc., Respondent, vs. Ah Gee Young, Appellant. Attorney-General for People, G. W. Jones and M. Farley and Graham & Monson for Appellant.	Superior Court of Fresno County.	Criminal.	By information—Murder.	Information filed December 2, 1889. Verdict January 24, 1890, guilty, first degree. Judgment February 8, 1890, death. Notice of appeal filed March 13, 1890.	Transcript filed April 16, 1890.	
20683—The People, etc., Respondent, vs. Joseph W. Wallace, Appellant. Attorney-General for People, Robert Ferral for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Murder.	Information filed July 24, 1889. Verdict October 8, 1889, guilty, first degree. Judgment November 22, 1889, death. Notice of appeal filed December 2, 1889.	Transcript filed April 16, 1890.	
20695—The People, etc., Respondent, vs. Percy Douglass, Appellant. Attorney-General for People, John Aherns and P. Reddy for Appellant.	Superior Court of Fresno County.	Criminal.	By information—Assault with intent to commit murder.	Information filed October 12, 1889. Verdict January 16, 1890, guilty, assault with deadly weapon. Judgment January 25, 1890, eight years. Notice of appeal filed January 25, 1890.	Transcript filed May 5, 1890.	

20697—The People, etc., Respondent, vs. Angus M. Hartman, Appellant. Attorney-General for People, Wm. H. Webb, for Appellant.	Superior Court of Monterey County.	Criminal.	By information—Embezzlement.	Information filed December 21, 1889. Verdict February 28, 1890, guilty. Judgment March 8, 1890, two years. Notice of appeal filed March 10, 1890.	Transcript filed May 14, 1890.
20698—The People, etc., Respondent, vs. Llewellyn A. Powell, Appellant. Attorney-General for People, George C. Ross and George A. Knight for Appellant.	Superior Court of San Mateo County.	Criminal.	By information—Murder.	Information filed February 6, 1889. Verdict September 7, 1889, guilty of manslaughter. Judgment October 2, 1889, ten years. Notice of appeal filed October 2, 1889.	Transcript filed May 20, 1890.
20700—The People, etc., Respondent, vs. John E. Lattimore, Appellant. Attorney-General for People, Bower & Grant for Appellant.	Superior Court of Los Angeles County.	Criminal.	By information—Arson.	Information filed January 2, 1890. Verdict February 4, 1890, guilty, first degree. Judgment February 18, 1890, twelve years. Notice of appeal filed February 24, 1890.	Transcript filed May 17, 1890.
20704—Ex parte Chas. E. Clark on habeas corpus. Attorney-General for People, Carroll Cook for Petitioner.	Supreme Court of California.	Criminal.		Petition filed May 13, 1890. Argued by Attorney-General June 13, 1890, for Petitioner.	
20706—The People, etc., Respondent, vs. Geo. H. W. Bruggy, Appellant. Attorney-General for People, J. C. Sims for Appellant.	Superior Court of Sonoma County.	Criminal.	By information—Murder.	Information filed February 26, 1890. Verdict March 28, 1890, guilty, first degree. Judgment April 16, 1890, death. Notice of appeal filed May 17, 1890.	Transcript filed June 4, 1890.

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20707.—The People, etc., Respondent, vs. Daniel Bemmerly, Appellant. Attorney-General for People, Clark & Aram, J. E. Strong, and Craig & Hawkins for Appellant.	Superior Court of Yolo County.	Criminal.	By information—Murder.	Information filed June 3, 1889. Verdict September 29, 1889, guilty, second degree. Judgment October 28, 1889, seventeen years. Notice of appeal filed October 28, 1889.	Transcript filed June 2, 1890.	
20708.—The People, etc., Respondent, vs. Harry Wheatley, Appellant. Attorney-General for People, Carroll Cook for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Burglary.	Information filed September 19, 1889. Verdict October 17, 1889, guilty, second degree. Judgment October 26, 1889, eight years. Notice of appeal filed December 18, 1889.	Transcript filed June 6, 1890.	
20709.—The People, etc., Respondent, vs. Chas. Smith, Appellant. Attorney-General for People, Alva E. Snow for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Burglary.	Information filed February 24, 1890. Verdict March 24, 1890, guilty, first degree. Judgment March 29, 1890, five years. Notice of appeal filed May 24, 1890.	Transcript filed June 10, 1890.	
20711.—The People, etc., Respondent, vs. Chas. Johnson, Appellant. Attorney-General for People, Carroll Cook and J. E. Foulds for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Burglary.	Information filed November 12, 1889. Verdict January 15, 1890, guilty, second degree. Judgment January 17, 1890, ten years. Notice of appeal filed June 4, 1890.	Transcript filed June 16, 1890.	

20712—The People, etc., Respondent, vs. James Barton, Appellant. Attorney-General for People, Carroll Cook and J. E. Foulds for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Burglary.	Information filed January 15, 1890. Verdict January 30, 1890, guilty, first degree. Judgment January 31, 1890, ten years. Notice of appeal filed June 4, 1890.	Transcript filed June 16, 1890.
20713—The People, etc., Respondent, vs. Antonio Perez, Appellant. Attorney-General for People, Carroll Cook and J. E. Foulds for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Grand larceny.	Information filed August 21, 1889. Verdict October 18, 1889, guilty. Judgment October 26, 1889, nine years. Notice of appeal filed June 4, 1890.	Transcript filed June 16, 1890.
20714—The People, etc., Respondent, vs. Harvey Fowler, Appellant. Attorney-General for People, Carroll Cook and J. E. Foulds for Appellant.	Superior Court of Santa Barbara County.	Criminal.	By information—Taking for purposes of prostitution an unmarried female under the age of eighteen years.	Information filed July 2, 1889. Verdict July 11, 1889, guilty. Judgment July 13, 1889, ten years. Notice of appeal filed June 6, 1890.	Transcript filed June 16, 1890.
20716—The People, etc., Respondent, vs. William Marino, Appellant. Attorney-General for People, Barclay Henley and Clitus Barbour for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Grand larceny.	Information filed August 7, 1888. Verdict March 25, 1889, guilty. Judgment May 11, 1889, four years. Notice of appeal filed June 22, 1889.	Transcript filed June 24, 1890.
20717—Ex parte Bemmerley on habeas corpus. Attorney-General for People.	Supreme Court of California.			Petition filed and writ issued June 25, 1890. Argued July 7, 1890 for Petitioner.	

COPY OF ATTORNEY-GENERAL'S DOCKET OF CRIMINAL CASES—Continued.

TITLE OF CAUSE.	In What County Tried and Adjudged.	Character of Action.	Mode of Prosecution and Nature of Crime.	Stage of Proceedings in Court Below.	Memorandum of Judgment in Supreme Court.	Remarks.
20719—The People, etc., Respondent, vs. Geo. N. Miller, Appellant. Attorney-General for People, Carroll Cook and J. E. Foulds for Appellant.	Superior Court of Merced County.	Criminal.	By information—Grand larceny.	Information filed September 6, 1889. Verdict October 5, 1889, guilty. Judgment October 25, 1889, two and one half years. Notice of appeal filed June 6, 1890.	Transcript filed June 24, 1890.	
20727—The People, etc., Respondent, vs. W. S. Clendennin, Appellant. Attorney-General for People, Hunsaker & Britt for Appellant.	Superior Court of San Diego County.	Criminal.	By information—Assault with intent to commit murder.	Information filed October 19, 1889. Verdict January 4, 1890, guilty. Judgment February 1, 1890, fourteen years. Notice of appeal filed July 8, 1890.	Transcript filed July 31, 1890.	
20728—The People, etc., Respondent, vs. Geo. N. Miller, Appellant. Attorney-General for People, Carroll Cook and J. E. Foulds for Appellant.	Superior Court of Merced County.	Criminal.	By information—Grand larceny.	Information filed September 6, 1889. Verdict October 5, 1889, guilty. Judgment October 25, 1889, two and one half years. Notice of appeal filed June 6, 1890.	Transcript filed August 8, 1890.	
20730—The People, etc., Respondent, vs. Lew Wing, Appellant. Attorney-General for People, John Flournoy for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Burglary.	Information filed May 1, 1890. Verdict July 21, 1890, guilty, second degree. Judgment July 25, 1890, five years. Notice of appeal filed July 30, 1890.		

20731.—The People, etc., Respondent, vs. Joseph Miller, Appellant. Attorney-General for People, James F. Smith for Appellant.	Superior Court of San Francisco.	Criminal.	By information—Burglary.	Information filed April 24, 1890. Verdict May 5, 1890, guilty, second degree. Judgment May 17, 1890, four years. Notice of appeal filed June 20, 1890.	
20737.—The People, etc., Respondent, vs. Hanford L. Gordon, Appellant. D. W. Herrington and Attorney-General for People, H. V. Morehouse and Hiram D. Tuttle for Appellant.	Superior Court of Santa Clara County.	Criminal.	By information—Assault with intent to commit murder.	Information filed April 21, 1890. Verdict June 20, 1890, guilty. Judgment June 25, 1890, \$2,500 fine, or one day for each \$4. Notice of appeal filed August 4, 1890.	
20738.—The People, etc., Respondent, vs. Ah Jake, Appellant. Attorney-General for People, Gillis & Tapscott for Appellant.	Superior Court of Siskiyou County.	Criminal.	By information—Murder.	Information filed October 15, 1889. Verdict November 27, 1889, guilty, second degree. Judgment February 19, 1890, thirteen years. Notice of appeal filed February 20, 1890.	

BIENNIAL REPORT

OF THE

ADJUTANT-GENERAL

OF THE

STATE OF CALIFORNIA.

1889-1890.



SACRAMENTO:

STATE OFFICE, : : : : : J. D. YOUNG, SUPT. STATE PRINTING.

1890.

REPORT.

STATE OF CALIFORNIA, ADJUTANT-GENERAL'S OFFICE, }
SACRAMENTO, October 12, 1890. }

To his Excellency R. W. WATERMAN, Governor and Commander-in-Chief:

SIR: I have the honor to submit my report of the transactions of this office, and of matters appertaining to the military branch of the State Government for the fortieth and forty-first fiscal years, ending June 30, 1890.

NATIONAL GUARD.

The National Guard of this State now consists of forty-six companies of infantry, eleven companies of artillery armed, equipped, and drilled as infantry, two light batteries of artillery, one company of cavalry, and one cadet company—sixty full companies and one cadet company, organized into eight regiments, two battalions, and one unattached company. The force is also organized in six brigades by counties, the whole constituting one division.

Previous to the last session of the Legislature, there were fifty full companies and four cadet companies. The last Legislature amended the Political Code, authorizing the formation of ten additional companies, and the section relating to cadet companies was so amended that all the members of them were required to be pupils in some public school or schools within the limits of their respective command. The amendment also forbid the publishing of the percentage of attendance of such cadet companies in the periodical orders giving the record of the attendance of the various companies, for the reason that the large attendance of such members who were at school during the week, caused the percentage of the regiments to which they were attached to appear proportionally larger than other organizations, and thus they were gaining credit for a larger attendance than they were justly entitled to. Under the law as amended, the following new companies were organized:

A company was organized in San Diego September 7, 1889, under the name of the San Diego Rifles, which afterward became Company A, Ninth Regiment of Infantry.

On the third of December, 1889, a company was organized in Ventura, which became Company D of the Seventh Infantry.

On December 19, 1889, companies were organized in the cities of Marysville, Red Bluff, and Redding, which became Companies C, D, and E, of the Eighth Battalion of Infantry, respectively.

On December 21, 1889, a company was organized in Arcata, Humboldt County, which became Company B, of the Tenth Battalion of Infantry.

On December 23, 1889, a company was organized in the city of Pasadena, which became Company B, Seventh Infantry.

On January 3, 1890, a company was organized in Riverside, which became Company C, of the Ninth Infantry.

On January 6, 1890, a company was organized in Santa Ana, which became Company F, Ninth Infantry.

On January 7, 1890, a company was organized in San Francisco, which became Company H, of the Third Infantry.

After these companies were organized, the following changes were made in the regimental organizations: A new regiment was organized in the First Brigade, and designated the Ninth Regiment of Infantry. Company B, of the Seventh Infantry, stationed in San Diego, Company D, of the Seventh Infantry, stationed in Pomona, and Company E, of the Seventh Infantry, stationed in San Bernardino, were detached from that regiment and became Companies B, D, and E, of the Ninth Regiment of Infantry, to which was also attached the new companies organized in the cities of San Diego, Riverside, and Santa Ana, which received the letters A, C, and F, respectively. The new companies organized in Pasadena and Ventura were attached to the Seventh Regiment of Infantry, and became Companies B and D of that regiment, respectively.

A new battalion, consisting of five companies, was organized in the Fifth Brigade, and designated the Eighth Battalion of Infantry, composed of the two old companies stationed in Chico and Colusa, and the three new companies organized in Marysville, Red Bluff, and Redding.

A new battalion of two companies was organized in the Sixth Brigade, and designated the Tenth Battalion of Infantry, consisting of the Eureka Guard, an old company stationed at Eureka, and for many years the only company in the brigade, which became Company A, and the new company formed in Arcata, which became Company B.

The Ninth Regiment of Infantry was organized by the election of E. B. Spileman as Colonel, on the eighth day of February, 1890.

The Eighth Battalion of Infantry was organized by the election of Park Henshaw as Lieutenant-Colonel, on the twentieth day of March, 1890; and the Tenth Battalion of Infantry was organized by the election of Major J. D. H. Chamberlin, as Major, on the thirteenth day of May, 1890.

By the organization of these regiments and battalions, every company in the State, except the San Francisco Hussars, was brought into a regimental or battalion formation, and the National Guard of this State is now organized on a more systematic basis, and the companies are distributed more evenly and more in accordance with the military requirements of the State than ever before. There is but one change that I would suggest, and that is that one more company be organized and stationed in Oroville, to be attached to the Eighth Battalion of Infantry, thus raising it to a full regiment; and I recommend that this coming Legislature authorize the formation of one more company for that purpose. There is now on file in this office an application from the citizens of that place to form a new company.

The amendment to Section 2032 of the Political Code, hereinbefore alluded to, requiring all members of cadet companies to be pupils in some public school or schools, necessitated the muster-out of the State service the cadet companies attached to the First and Second Regiments of Artillery and the Third Regiment of Infantry, leaving in the service the one attached to the First Regiment of Infantry, it being the only one that conformed to the requirements of the law. The muster-out of the three cadet companies mentioned took effect March 31, 1889.

By an amendment to Section 2022, Political Code, all Regimental Signal Corps were abolished, and a new section (No. 1980) was added, authorizing the formation of Brigade Signal Corps instead.

In accordance with such amendment, General Orders No. 8, series of 1889, Paragraph V. was issued, directing the discontinuance of such Signal Corps, and the following Brigade Signal Corps were subsequently formed: In the First Brigade, one of twenty members, on the twenty-eighth day of May, 1890; one in the Second Brigade, consisting of forty members, on the thirtieth day of April, 1889; one in the Third Brigade, of ten members, on June 18, 1889, and one of ten members in the Fourth Brigade, on July 17, 1889.

During the period covered by this report there has been but one change among the general officers: Edward P. Johnson was appointed Brigadier-General, First Brigade, March 7, 1889, vice H. H. Boyce, whose name was withdrawn.

Section 2003 of the Political Code was amended during the last session of the Legislature by transferring the counties of Monterey and San Benito from the First Brigade to the Second, and the counties of Yuba and Sierra from the Fourth to the Fifth Brigade. These changes were made for the reason that the counties transferred properly belonged to the brigades to which they were finally attached, bringing them nearer the brigade headquarters, and for the reason that it was desired that the new companies to be formed should be attached to organizations within those brigades.

NEW LAWS REGARDING THE MILITIA.

During the last session of Congress a bill known as the Henderson bill, "to promote the efficiency of the militia," was introduced. It did not become a law, owing to the large number of important issues before Congress during that session. It will probably be reached and passed during the coming session. The following are its most important features:

That the militia shall consist of every able-bodied male citizen who is more than eighteen and less than forty-five years of age, and such other acceptable male residents as may volunteer for militia duty.

That the militia shall be divided into two classes, the organized to be known as the National Guard and the unorganized to be known as the Reserve Militia.

That the Reserve Militia shall not be subject or liable to any military duty to the United States except when called into service by Act of Congress passed for that purpose, or by proclamation of the President of the United States.

That the National Guard shall consist of such regularly enlisted troops as are or may be organized in the several States and Territories in pursuance of their respective laws; *provided, however*, that an original enlistment shall be for not less than three years, and reenlistment for not less than one year, and in both cases with the provision that if such enlistment should expire during a time when in the service of the United States, that it shall continue until the expiration of the time for which called into such service; and *provided further*, that such extension of term of service shall not exceed ninety days.

That the organization of the National Guard, the number, rank, and duties of its staff officers, and the organization of its bureaus of administration shall be such as the laws of the respective States and Territories may prescribe; *provided, however*, that such organization shall conform as closely to that prescribed for the army as possible.

That there shall be an Adjutant-General in each State and Territory, who shall perform such duties as may be prescribed by the laws of each State and Territory, respectively, and who shall make returns to the Secretary of War, at such times and in such form as he shall from time to time prescribe, of the number of the National Guard, and shall also make such reports as may from time to time be required by the Secretary of War.

That the Secretary of War shall, in his annual report of each year, transmit to Congress an abstract of the returns and reports of the Adjutant-General of the States and Territories, with such observations thereon as he may deem necessary for the information of Congress.

That the National Guard shall be trained in accordance with the same system of drill and tactics that may from time to time be prescribed for the army.

That every officer and enlisted man of the National Guard called into the service of the United States shall be held to be in such service, and any officer or enlisted man who shall refuse or fail to obey such call shall be subject to trial by Court-martial.

That the sum of \$1,000,000 is hereby annually appropriated, to be paid out of any money in the Treasury not otherwise appropriated, for the purpose of providing for issue to the States and Territories, for the use of the National Guard, ordnance, quartermaster, subsistence, and other military stores and supplies. The purchase or manufacture of such stores and supplies shall be made under the direction of the Secretary of War, in the same manner that they are manufactured or otherwise provided for the use of the army. Such stores and supplies shall remain the property of the United States, and shall be receipted for, accounted for, and when unserviceable disposed of, in such manner as the Secretary of War may direct.

That the amount of the appropriation for furnishing stores and supplies to the militia shall be apportioned by the Secretary of War among the several States and Territories according to the number of Senators and Representatives to which each State, respectively, is entitled in the Congress of the United States, and to the Territories and District of Columbia such proportion and under such regulations as the President may prescribe; *provided, however*, that no State shall be entitled to the benefits of the appropriation apportioned to it unless the number of its regularly enlisted and organized active militia shall be at least one hundred men for each Senator and Representative to which such State is entitled in the Congress of the United States. And the amount of said appropriation which is thus determined not to be available shall be covered back into the Treasury. All stores and supplies issued under the provisions of this Act shall be transported and delivered to the several States and Territories, at the expense of the United States, by the Quartermaster's Department of the Army.

That a bureau shall be established in the War Department, to be called the Bureau of Militia, which shall have charge, under the direction of the Secretary of War, of all matters concerning the militia; and the President shall appoint an officer from the National Guard to be Chief of the Bureau of Militia, who shall hold such office at the pleasure of the President, and while holding it shall have the relative rank and receive the pay and allowances of a Colonel of cavalry in the army.

That each State or Territory furnished with stores and supplies under the provisions of this Act shall arm its National Guard with the arms issued to it under the provisions of this Act.

That any State or Territory may purchase for the use of its militia stores and supplies from any department of the army, in addition to those issued under the provisions of this Act, and such stores shall be sold to States and Territories at the price at which they are listed for issue to the army.

That each State or Territory furnished with stores and supplies under the provisions of this Act shall require every organization in its National Guard, not excused by the Governor of such State or Territory, to go into camp of instruction, or to be quartered at a United States fort for instruction in heavy artillery as hereinafter provided, at least five consecutive days in each year; and to assemble for drill and instruction not less than twelve times in each year, and shall also require an annual inspection of each organization in its National Guard to be made by an officer or officers thereof.

That notice shall be given to the Secretary of War by the Adjutant-General of each State and Territory of the times and places of the annual inspection of the National Guard of his State or Territory, and thereupon the Secretary of War may detail an officer of the army to accompany the State Inspector during his inspection and observe the condition of the troops and public property; *provided, however*, that such officer shall have no authority to control or interfere with the State Inspector, or to exercise any power or authority during such inspection over the troops inspected. He shall make a report to the Secretary of War, who shall furnish a copy thereof to the Governor of the State or Territory of such matters as he may deem proper to bring to his attention.

That upon the application of the Governor of any State or Territory furnished with stores and supplies under the provisions of this Act, the Secretary of War shall detail one or more officers of the army to attend any encampment of the National Guard, and to give such instruction and information to the officers and men of the National Guard assembled in such camp as may be requested by the Governor. Such officer or officers shall make a report to the Secretary of War, who shall furnish a copy thereof to the Governor of the State or Territory, on the condition and efficiency of the troops assembled.

That on the request of the Governor of any State or Territory furnished with stores and supplies under the provisions of this Act the Secretary of War may order a detachment of the army to encamp with the National Guard of such State or Territory at their annual camp of instruction to aid the officers thereof in carrying out the purposes of such camp; *provided, however*, that the grounds for such encampment shall be furnished without expense to the United States; and *provided further*, that the officers of the National Guard assembled at such camp shall exercise no command or control over the officers or men of the army so encamped.

That upon the application of any Governor, or any brigade or division commander of the National Guard of any State or Territory furnished with stores and supplies under the provisions of this Act, approved by the Governor of such State or Territory, the Secretary of War may detail an officer of the army to act on the staff of such Governor or of such brigade or division commander. An officer so assigned shall be commissioned

an officer in such National Guard by the Governor of such State or Territory, and may wear the uniform of his rank in the National Guard, but shall receive no other pay or emoluments from the United States than those of his rank in the army as on detached service. All such assignments shall be revoked at the request of the Governor of the State or Territory, or at pleasure by the Secretary of War, and the officer whose assignment is so revoked shall thereupon cease to be an officer of the National Guard of such State or Territory.

That upon the application of the Governor of any State furnished with stores and supplies under the provisions of this Act, in which there is located a garrisoned United States fort for coast defense, the Secretary of War is authorized to permit organizations of the National Guard to be quartered at or in such fort of the United States, and to drill at the heavy or other guns forming the armament thereof; *provided, however*, that they shall not be so quartered for a less period than five consecutive days; and *provided further*, that the command of such fort or garrison, and of all the United States officers and troops stationed thereat, shall remain with the regular commanding officer of the post, without regard to the rank of the commanding or other officers of the National Guard temporarily so quartered.

That the troops of the National Guard quartered at any fort of the United States for instruction may expend in firing practice such amount of ammunition as may be prescribed by the Secretary of War, who shall also detail an officer of the army to supervise the instruction and firing practice.

That the President is authorized to accept as volunteers in the service of the United States, for instruction in heavy artillery, and the defense of fortifications, for a period of not less than thirty nor more than forty days, any organization of the National Guard which has the permission of the Governor of the State or Territory to volunteer, and of which not less than thirty enlisted men and one commissioned officer of such organization so volunteer. Such volunteers shall be transported to and from the place designated for their instruction. Each officer shall receive two rations a day, or commutation therefor, and the pay and allowances of an officer of his grade in the army; each enlisted man shall receive one ration a day, and double the pay of an enlisted man of his grade in the army. They shall be quartered at or in a fort of the United States; shall be subject to the rules and regulations governing the army during their period of service, and such provision made for their instruction as the President may direct; *provided, however*, that the number of volunteers accepted and mustered into the service of the United States under the provisions of this section shall not exceed two thousand five hundred men in any one year.

That for the purposes of instruction the President is authorized to accept the services of infantry volunteers for not less than thirty days and not exceeding forty days, and not exceeding five thousand men in any year; *provided, however*, that no such volunteer shall be accepted who is not a commissioned officer of the National Guard, or a regularly enlisted man in the National Guard who has served as such not less than one year. Such volunteers may be organized by the Governor of the State or Territory in which they volunteer, into provisional companies of not less than thirty men each, and, if more than one such company, into provisional battalions or regiments. Such volunteers shall be transported to and from the place designated for their instruction. Each officer shall receive two rations per day, or commutation therefor, and the pay and allowances of an officer of his grade in the army; each enlisted man shall receive one ration a day and double the pay of an enlisted man of his grade in the army. They shall be subject to the rules and regulations governing the army during their period of service, and shall be put into such camps of instruction established for the army as the President may direct. If the number of commissioned officers volunteering under this section is greater than the number required for the provisional organizations formed, their services shall nevertheless be accepted, and they shall be assigned temporarily to the organizations of the army in such camp as supernumerary officers under instruction, or otherwise assigned for instruction, as the President may direct.

Our own Code should be amended to conform to the proposed changes in the United States laws; in fact, many of the sections need amendment. They are full of obsolete provisions, and probably a bill will be introduced during the coming session of the Legislature embodying such amendments.

NEW UNIFORMS.

The Uniform Board has continued its work, until now the whole National Guard is provided with new uniforms. Each company is allowed by law \$150 per annum to purchase uniforms and to repair the same. For many years that section has been a dead letter, for the reason that no appropriation has been made to carry out its provisions. I hope the coming Legislature will make the appropriations for military

purposes large enough to permit the companies to receive the above amount. It is small, but sufficient with the amount of clothing now on hand in the companies to keep them in pretty good condition for the next two fiscal years. The companies, however, still lack overcoats, and I would respectfully recommend that the sum of \$10,000 be appropriated for the purpose of providing that necessary article of clothing.

ARMS AND EQUIPMENTS.

During the period covered by this report the State has drawn the allowance from the Federal Government for two fiscal years. The allowance for one year was taken in rifles and for the other in equipments. The rifles were distributed equally among all the companies, eight to each, which, with the ten new ones issued previously, gives to each company in the National Guard eighteen new rifles, and to most of them forty-two old ones, some of the very largest companies having a few more old ones. The old rifles were issued in 1875, and have therefore been in use fifteen years. A few of them, perhaps five per cent, are unserviceable, many of which can be rendered serviceable by the insertion of new parts, a supply of which will be drawn on the allowance for the current fiscal year, which will reduce the unserviceable ones to perhaps three per cent. After this year the whole allowance can be taken in rifles, say ten to each company per year, so that in four years more the old ones can be almost entirely replaced. This can be done with the present allowance. Should the Henderson bill become a law it can be done in half that time.

The equipments drawn from the Government were new belts and plates, steel bayonet scabbards, and McKeever cartridge boxes; they were issued to the old companies. Equipments for the new companies are now on the road, and before this report is out of press will be issued to those companies.

TARGET PRACTICE.

The last Legislature changed the system of holding annual target practice, requiring the troops to practice two days instead of one, as heretofore. There is nothing gained by such change; the object of the annual target practice is not to learn to shoot, but to make a record so that a comparison can be had with the records of previous years, and thus ascertain the amount of progress being made in that important part of the soldier's instruction; such being the case, one day's practice is as good or better than two. The latter system leads to innumerable complications, makes twice the work, and no advantage is gained; I would therefore recommend that the law be changed, and the old system reëstablished. To induce the men to come out and take part in both days' practice, it was decided to offer a prize for the first day's work, and a silver medal struck with the same die that the State decoration for marksmanship was made with, but with a pin and ribbon attached, and some additional ornamentation was provided, and awarded to the member of each organization making the best score in such first day's practice.

Blunt's "Firing Regulations for Small Arms" has been adopted by the United States Army, and it is desired that that system may be followed by the National Guard of this State, subject to such modifications

as may be required on account of our not being provided with permanent ranges, and the same facilities for carrying out its provisions that are furnished the army, and on account of the inability of our men to give the necessary time to fully comply with them. In the new "Regulations Governing the National Guard of California," recently issued, there is incorporated a system of theoretical instruction and gallery practice, which, if followed in our companies, would make a vast improvement in their records at the end of the year. The importance of such preliminary instruction is not realized by the greater part of our military commanders.

ENCAMPMENTS.

During the year 1888 there were but two encampments held, both regimental. The First Regiment of Infantry encamped at San José from July twenty-second to twenty-ninth; it was designated "Camp Tirrell," in honor of Major Francis H. Tirrell, Surgeon of the regiment, who died in the month of January preceding the encampment. There was an average attendance during the eight days of two hundred and seventy-eight.

The Third Regiment of Infantry encamped at Santa Cruz from August nineteenth to twenty-sixth. This camp was named "Camp Dimond," in honor of Major-General W. H. Dimond, commanding Division, N. G. C. There was an average attendance during the eight days of two hundred and sixty-six.

There was no appropriation for encampments during this year, but there was an unexpended balance in the encampment fund of the preceding year, which was divided equally between the two regiments. I was not personally present at either of these two encampments, and can, therefore, give no further details of them.

During the year 1889 every organization in the State went into encampment.

The First Brigade went into camp at Pacific Beach, near the city of San Diego, for eleven days, commencing on the third day of August and ending on the thirteenth. This was a brigade camp, under the command of Brigadier-General E. P. Johnson. It was the only brigade camp held during the year. The camp, which was designated "Camp Dimond," was very pleasantly located on a level plateau overlooking the ocean, and was reached from San Diego by the motor line running to Pacific Beach.

By the kindness of Brigadier-General B. H. Grierson, U. S. A., commanding the District of Arizona, a company of the Ninth Infantry, U. S. A., was ordered to camp with the brigade, and Captain H. K. Bailey, Fifth Infantry, U. S. A., Judge-Advocate of the district, was detailed to inspect and report upon the encampment. The camp was well laid out, the tents were entirely new, the headquarters tent being a large one, nearly one hundred and fifty feet long, divided by board partitions into offices, reception-rooms, mess-rooms, and a large apartment fitted with seats for the convenience of an audience while listening to the music of the regimental band, which played there every day and evening during the encampment. The officers and each company were provided with large mess tents, and it seems to me that the messing arrangements were better than any I saw at other encampments. The troops consisted of the General and general staff officers of the First

Brigade and the Seventh Regiment of Infantry. Captain Bailey and Lieutenants Robertson and Wittenmyer, of Company E, Ninth Regiment of Infantry, U. S. A., personally superintended the drills of the various companies and the regiment; and through their corrections and instruction, and the example set by the company of regulars, the command made remarkable progress in drill during the time spent in the camp. Several companies had their annual target practice, as prescribed by law and general orders, while in camp; but with the limited time at their disposal, and the impossibility of providing proper facilities, the practice was not a success. I am of the opinion that target practice should not be attempted while organizations are in camp; the time can be much better spent in drill and instruction in guard and other camp duties, leaving instruction in target practice to be carried on in the armories or on the ranges during the rest of the year.

The practice of having companies of the regular service encamp with National Guard organizations, is growing in popularity in the Eastern States, and is one out of which the greatest good will come to both services. The remarkable progress made in drill and discipline in the camp of the First Brigade, was owing to two things: first, the presence of the brigade commander, General Johnson, and his efficient staff; and, second, to the presence of the regulars in the camp. It is hoped that the practice will continue, and that hereafter at all our encampments there may be present bodies of regular troops. The mutual benefit that would accrue is well set forth by Colonel Turner, First Illinois Infantry, in an address lately delivered by him to the Illinois National Guard Association, from which I quote:

The officers of the regular army can teach us how to rapidly construct, out of scant materials, effective cover in the open field. We can teach them how to support, on scant appropriations, undiscouraged battalions of earnest men. They can teach us how to bear the privations of campaigning, how to put up with discomfort, and, often with distress. We can teach them how to bear patiently the lack of appreciation on the part of the public of our earnest efforts for the national good, how to bear slights and ridicule without complaint, and without loss of self-respect, or any diminution of our enthusiasm for the service. They can give us many a valuable suggestion in the multitudinous minutiae of military instruction. We can give to them something of the freedom and broadness which comes to the citizen soldier through the untrammelled roominess of civil life. It would benefit the regular army further, in that its enlisted men might mingle for a time with the higher grade of soldiers in the National Guard, catch something of their enthusiasm, and their spirit of self-sacrifice, their devotion to the State. They (the regulars) can teach us much that will be of value as to the duties and course of action which an officer should pursue under the varying, often difficult, circumstances of military life. We can give to them a knowledge of the value of a strong personal interest and sympathy with the men who come under our command. And each could help the other to a fuller realization of the fact that the officer is a power in his position for either good or evil, over the lives and character of the men he commands; that it is his prime and highest duty to be a model—an example for his command in all that pertains to the life of the soldier, the gentleman, the citizen, the patriot.

The First Regiment of Infantry encamped at Santa Rosa for ten days, from the twentieth day of July until the twenty-eighth. The camp was designated "Camp Orton," and very beautifully located in a grove of oaks about one and a half miles from the city. The camp was profusely decorated with Chinese lanterns, flags, etc. This question of decorating camps of the National Guard has been discussed considerably of late as being unmilitary, and as having a tendency to make of the camp a sort of picnic, and therefore as interfering with the proper performance of military duties. I do not consider the decoration of camps or the effort to make them beautiful or attractive as such a grave offense, if it is not carried to excess. It is customary to locate them near cities or towns,

and if they are not made pleasant for the men, or at least as attractive as the town, then large numbers of the men will endeavor to obtain passes, or will go without leave, and spend their evenings, when off duty, out of camp; while, on the other hand, if the camp is made bright and attractive during evenings, the men will prefer to remain in them. Therefore, I see no harm in permitting decoration in National Guard camps when they do not interfere with duty, or the imparting and receiving the instruction for which they are primarily established. The use of decoration should, however, be regulated by the commanding officer, who should prescribe the kind and amount to be used, making them uniform throughout the camp. This was the twelfth annual encampment of the First Infantry, and the regiment is now very well fitted out with camp equipage, and the officers and men having had considerable experience, are pretty well instructed in camp duties.

The Second Regiment of Artillery encamped at Monterey for eight days, from August seventeenth to twenty-fifth. The camp was established in a grove of oaks near the grounds of the Hotel Del Monte. The camp was designated "Camp Cutting," in honor of the Brigadier-General commanding the Second Brigade. The ground selected was very dusty, so much so that it very seriously interfered with the proper performance of camp duty. The Signal Corps of the Second Brigade encamped with this regiment.

The Third Regiment of Infantry encamped at Ukiah for eight days, commencing on the eighth day of September and ending on the fifteenth. The camp was beautifully located in a grove of oak and pine timber about half a mile from the town. It was named "Camp Waterman," in honor of the Commander-in-Chief. Some very good work was done in this camp, especially in the skirmish drill.

The Fifth Regiment of Infantry encamped at Santa Cruz for eight days, commencing on the eleventh day of August and ending on the eighteenth. The camp was located about a mile west of the town, and was named "Camp Miles," in honor of Major-General N. A. Miles, U. S. A., commanding the Division of the Pacific.

The Sixth Regiment of Infantry also encamped at Santa Cruz, in the same field, and at the same time that the Fifth Regiment was encamped, viz.: from the eleventh to the eighteenth of August. The camp was named "Camp Dimond," in honor of Major-General Dimond.

The First Regiment of Artillery also encamped at Santa Cruz, upon nearly the same ground as that occupied by the Sixth Infantry, but one week later, viz.: from the eighteenth to the twenty-fifth of August. The camp was named "Camp Shafter," in honor of Colonel William R. Shafter, First Infantry, U. S. A.

The Chico Guard and the Colusa Guard, then both unattached companies, camped together at Sisson, Siskiyou County, from August eleventh to eighteenth. The camp was named "Camp Montgomery," in honor of Gen. J. W. B. Montgomery, commanding Fifth Brigade, N. G. C.

The Eureka Guard had an encampment at Campton Park, Humboldt County, from August sixth to August thirteenth. The camp was named "Camp Freese," in honor of Brigadier-General J. W. Freese, commanding Sixth Brigade, N. G. C.

The above mentioned are all the encampments held during the fortieth and forty-first fiscal years, the period covered by this report.

It is not the intention to give an extended account of the encamp-

ments, but to merely make a permanent record of them for future reference. The encampments held during the year 1890 did not take place during the period covered by this report, and will not be noted herein, but the report of the inspecting officer detailed by the Secretary of War, and a brief record of the time and place of holding them, will be published in the appendix hereto in order to make a record for reference, as the next biennial report in which the record should appear will not be written for two years.

NEW REGULATIONS.

The regulations governing the National Guard of California have been rewritten and published, together with the provisions of the Codes relating to the military part of the State Government, and that pertaining to the University Cadets, the whole forming a volume of four hundred and seventy-one pages. Three thousand copies have been delivered by the State Printer, neatly bound in red morocco; each officer has been furnished with a copy, and several have been sent to each organization, leaving enough on hand to keep the National Guard supplied for several years.

RECORDS OF CALIFORNIA VOLUNTEERS.

The records of California Volunteers have been written, and the work, which will make a volume of about one thousand pages, is now in press. The book consists of the record of about sixteen thousand individual California Volunteers taken from the original muster and muster-out rolls. It commences with an account of the first call on the State for volunteers on the breaking out of the Civil War. Then follows an account of the proposed invasion of California by Confederate troops from Texas, and the evidence of sympathy with rebellion within its borders; then an account of the proposed invasion of Texas by troops to be sent from this State via Sonora and Chihuahua, and the cause of its abandonment; then an account of the "California Column," which actually made the invasion of New Mexico and Texas, with an account of the conquest of New Mexico by Texan troops. Then follow the histories of the various regiments, with the record of the members of the same, commencing with the history of the First Regiment of Cavalry. The book will be invaluable as a work of reference. The rolls are getting worn out from constant handling, some of the names being almost illegible, and in a few years more would become quite so. Every day several applications are received from ex-volunteers for certificates of their service. Heretofore they have been made from the rolls, thus necessitating the handling of them every day. Hereafter the records can be made from the book. It is the intention to distribute them to living members of California Volunteers, public libraries, Adjutant-Generals of other States, and Grand Army posts. The law requires the issue of ten thousand copies bound in cloth, but only two thousand will be delivered this year; the pages will, however, be electrotyped, so that the balance or such as may be required can be run off without delay or much expense.

The following tables are attached to and made a part of this report:

- Table A—Appropriations for fortieth fiscal year.
- Table B—Appropriations for forty-first fiscal year.
- Table C—Military property of the State.
- Table D—Annual return of militia.
- Table E—Percentage of attendance.

Table F—Enrolled militia.
Table G—Roster of officers.
Table H—Retired list.
Table I—Commissions issued.
Table J—Certificates of reelection.
Table K—Commissions expired.
Table L—Resignations.
Table M—Deaths.
Table N—List of pardons granted.
Table O—List of exempt certificates issued.
Table P—Testimonials issued to California volunteers.
Table Q—Certificates of service issued to California volunteers.
Table R—Certificates of honorary membership of National Guard of California.
Table S—Commissions to officers of University Cadets.

Finally, I wish to return thanks to your Excellency for your kindness to me, and for the interest you have always had in the National Guard, and to assure you that under your administration the military force in this State has made a long step towards that perfection it is hoped the National Guard of this country will some day attain.

I am, sir, very respectfully, your obedient servant,

RICHARD H. ORTON,
Adjutant-General.

TABLE A.

APPROPRIATIONS AND EXPENDITURES—FORTIETH FISCAL YEAR.

<i>Salary of Adjutant-General.</i>			
Amount of appropriation.....			\$3,000 00
Certified to R. H. Orton.....	\$3,000 00		
	\$3,000 00		\$3,000 00
<i>Salary of Assistant Adjutant-General.</i>			
Amount of appropriation.....			\$2,050 00
Certified to Perrie Kewen.....	\$1,976 65		
Balance in fund.....	73 35		
	\$2,050 00		\$2,050 00
<i>Pay of Porter.</i>			
Amount of appropriation.....			\$300 00
Certified to C. C. Duhain.....	\$300 00		
	\$300 00		\$300 00
<i>Postage and Expressage.</i>			
Amount of appropriation.....			\$200 00
Certified to R. H. Orton, reimbursement per vouchers.....	\$133 11		
Certified to Wells, Fargo & Co.	59 50		
Certified to Western Union Telegraph Company.....	7 39		
	\$200 00		\$200 00
<i>Encampments.</i>			
Balance in fund.....			\$1,814 22
Certified to Colonel John H. Dickinson.....	\$907 11		
Certified to Colonel Robert Tobin.....	907 11		
	\$1,814 22		\$1,814 22
<i>For Promotion of Target Practice.</i>			
Amount of appropriation.....			\$1,750 00
Certified to R. H. Orton.....	\$2 25		
Certified to William McLaughlin.....	16 22		
Certified to Huntington-Hopkins Company.....	10 00		
Certified to Chas. Sonntag & Co.	1,012 50		
Certified to Geo. C. Shreve & Co.	707 25		
Balance in fund.....	1 78		
	\$1,750 00		\$1,750 00
<i>Claim of W. B. Burtis, for services rendered.</i>			
Amount of appropriation.....			\$708 35
Certified to assignee of W. B. Burtis.....	\$708 35		
	\$708 35		\$708 35
<i>Cleaning and Transportation of Arms, Traveling and Contingent Expenses of Adjutant-General.</i>			
Amount of appropriation.....			\$750 00
Certified to R. H. Orton, reimbursement per vouchers.....	\$478 04		
Certified to Perrie Kewen, reimbursement per vouchers.....	93 75		
Certified to James S. Smith.....	36 80		
Certified to Colonel Eugene Lehe.....	29 78		
Certified to William McLaughlin.....	13 50		
Certified to C. C. Duhain.....	9 50		
Certified to "Post" Publishing Company.....	6 00		
Certified to Morgan Brothers.....	13 20		
Certified to Union and Consolidated Ice Companies.....	13 45		
Certified to Frank H. Wing.....	13 75		
Certified to Max Burkhardt.....	41 00		
Balance in fund.....	1 23		
	\$750 00		\$750 00

TABLE A—Continued.

For Uniforms for National Guard.

Balance in fund		\$23,911 34
Certified to Schlamm Bros.	\$15,011 76	
Certified to A. S. Hubbard	225 00	
Certified to Golden Gate Woolen Manufacturing Co.	2,918 13	
Certified to Pioneer Woolen Factory	790 02	
Certified to J. M. Litchfield & Co.	4,391 12	
Certified to L. Lachman	498 75	
Certified to E. C. Hughes	66 56	
Certified to S. M. Farran	10 00	
	\$23,911 34	\$23,911 34

Appropriation for Deficiency in Military Fund for Thirty-ninth and Fortieth Fiscal Years.

Amount of appropriation		\$16,600 00
Certified to Commander First Brigade	\$300 46	
Certified to Commander Third Brigade	182 87	
Certified to Commander Fifth Brigade	100 00	
Certified to Commander Sixth Infantry	182 87	
Certified to Commander Seventh Infantry	300 00	
Certified to Commander Company D, Sixth Infantry	1,333 33	
Certified to Commander Company E, Sixth Infantry	1,800 00	
Certified to Commander Company F, Sixth Infantry	1,700 00	
Certified to Commander Company C, Seventh Infantry	1,400 00	
Certified to Commander Company D, Seventh Infantry	2,000 00	
Certified to Commander Company E, Seventh Infantry	2,000 00	
Certified to Commander Company F, Seventh Infantry	1,800 00	
Certified to Commander Company G, Seventh Infantry	1,500 00	
Certified to Commander Colusa Guard	2,000 00	
Certified to Commander Eureka Guard	47	
	\$16,600 00	\$16,600 00

Amount allowed for Armory Rents and other expenses of the National Guard—Fortieth Fiscal Year.

Amount of appropriation		\$70,000 00
Certified to Commanding Officer Division, N. G. C.	\$600 00	
Certified to Commander First Brigade	120 00	
Certified to Commander Second Brigade	1,680 00	
Certified to Commander Third Brigade	180 00	
Certified to Commander Fourth Brigade	360 00	
Certified to Commander Fifth Brigade	60 00	
Certified to Commander Sixth Brigade	60 00	
Certified to Commander First Infantry	1,375 00	
Certified to Commander Second Artillery	1,140 00	
Certified to Commander Third Infantry	1,140 00	
Certified to Commander Fifth Infantry	915 00	
Certified to Commander Sixth Infantry	285 00	
Certified to Commander Seventh Infantry	120 00	
Certified to Commander First Artillery	1,215 00	
Certified to Commander Company A, First Infantry	1,432 61	
Certified to Commander Company B, First Infantry	1,432 61	
Certified to Commander Company C, First Infantry	1,432 61	
Certified to Commander Company D, First Infantry	1,432 61	
Certified to Commander Company F, First Infantry	1,432 61	
Certified to Commander Company G, First Infantry	1,432 61	
Certified to Commander Company H, First Infantry	1,432 61	
Certified to Commander Cadet Company, First Infantry	77 52	
Certified to Commander Company A, Second Artillery	2,632 61	
Certified to Commander Company C, Second Artillery	1,432 61	
Certified to Commander Company D, Second Artillery	1,432 61	
Certified to Commander Company E, Second Artillery	1,432 61	
Certified to Commander Company F, Second Artillery	1,432 61	
Certified to Commander Company G, Second Artillery	1,432 61	
Certified to Commander Company H, Second Artillery	1,432 61	
Certified to Commander Cadet Company, Second Artillery	58 14	
Certified to Commander Company A, Third Infantry	1,432 61	
Certified to Commander Company B, Third Infantry	1,432 61	
Certified to Commander Company C, Third Infantry	1,432 61	
Certified to Commander Company D, Third Infantry	1,460 00	
Amounts carried forward	\$36,390 03	\$70,000 00

TABLE A—Continued.

Amounts brought forward.....	\$36,390 03	\$70,000 00
Certified to Commander Company E, Third Infantry.....	1,432 61	
Certified to Commander Company F, Third Infantry.....	1,432 61	
Certified to Commander Company G, Third Infantry.....	1,432 61	
Certified to Commander Cadet Company, Third Infantry.....	58 14	
Certified to Commander Company A, Fifth Infantry.....	1,432 61	
Certified to Commander Company B, Fifth Infantry.....	1,432 61	
Certified to Commander Company C, Fifth Infantry.....	1,432 61	
Certified to Commander Company D, Fifth Infantry.....	1,432 61	
Certified to Commander Company E, Fifth Infantry.....	1,432 61	
Certified to Commander Company F, Fifth Infantry.....	1,432 61	
Certified to Commander San Francisco Hussars.....	2,032 61	
Certified to Commander Company A, Sixth Infantry.....	1,432 61	
Certified to Commander Company B, Sixth Infantry.....	1,432 61	
Certified to Commander Company C, Sixth Infantry.....	1,432 61	
Certified to Commander Company D, Sixth Infantry.....	477 52	
Certified to Commander Company A, Seventh Infantry.....	1,432 61	
Certified to Commander Company B, Seventh Infantry.....	1,432 61	
Certified to Commander Company A, First Artillery.....	1,432 61	
Certified to Commander Company B, First Artillery.....	2,632 61	
Certified to Commander Company C, First Artillery.....	1,432 61	
Certified to Commander Company E, First Artillery.....	1,432 61	
Certified to Commander Company F, First Artillery.....	1,432 61	
Certified to Commander Company G, First Artillery.....	1,432 61	
Certified to Commander Cadet Company, First Artillery.....	58 14	
Certified to Commander Chico Guard.....	1,432 61	
Certified to Commander Eureka Guard.....	1,432 14	
Certified to Colonel David Wilder, Examining Board, Second Brigade.....	227 90	
Certified to Colonel J. W. Guthrie, Examining Board, Fourth Brigade.....	35 00	
Certified to Lieutenant-Colonel J. W. Staples.....	16 60	
Certified to John E. Klein.....	4 50	
Amount overpaid to forty old companies, which amount has been deducted from annual allowance for the forty-first fiscal year, and returned to Treasury.....		2,000 00
Amount overpaid Company D, Third Infantry, and returned to Treasury.....		17 39
Totals.....	\$72,017 39	\$72,017 39

TABLE B.

APPROPRIATIONS AND EXPENDITURES—FORTY-FIRST FISCAL YEAR.

<i>Salary of Adjutant-General.</i>		
Amount of appropriation.....		\$3,000 00
Certified to R. H. Orton.....	\$3,000 00	\$3,000 00
<i>Salary of Assistant Adjutant-General.</i>		
Amount of appropriation.....		\$2,400 00
Certified to Ferrie Kewen.....	\$2,400 00	\$2,400 00
<i>Pay of Porter.</i>		
Amount of appropriation.....		\$960 00
Certified to C. C. Duhain.....	\$960 00	\$960 00
<i>Postage, Expressage, and Telegraphing.</i>		
Amount of appropriation.....		\$250 00
Certified to R. H. Orton, per vouchers.....	\$109 52	
Certified to Wells, Fargo & Co.....	112 60	
Certified to Western Union Telegraph Co.....	27 88	
	\$250 00	\$250 00

TABLE B—Continued.

<i>Encampments.</i>		
Amount of appropriation		\$26,000 00
Certified to General E. P. Johnson	\$2,985 00	
Certified to Colonel John H. Dickinson	2,800 00	
Certified to Colonel John W. Guthrie	2,400 00	
Certified to Colonel James M. Donahue	2,400 00	
Certified to Colonel William Macdonald	2,800 00	
Certified to Captain C. B. Swain	400 00	
Certified to Captain B. H. Mitchell	400 00	
Certified to Colonel Eugene Lehe	2,400 00	
Certified to Colonel Robert Tobin	2,800 00	
Certified to Captain I. L. Crichton	400 00	
Certified to Major E. A. Denicke	137 50	
Balance in fund	6,077 50	
	\$26,000 00	\$26,000 00
<i>For Promotion of Target Practice.</i>		
Amount of appropriation		\$3,500 00
Certified to Charles Sonntag & Co.	\$2,626 10	
Certified to Geo. C. Shreve & Co.	684 00	
Certified to General E. P. Johnson	100 00	
Certified to Major E. A. Denicke	42 35	
Balance in fund	47 55	
	\$3,500 00	\$3,500 00
<i>Cleaning and Transportation of Arms, Traveling and Contingent Expenses of Adjutant-General.</i>		
Amount of appropriation		\$1,000 00
Certified to R. H. Orton, reimbursement, per vouchers	\$627 15	
Certified to Perrie Kewen, reimbursement, per vouchers	94 40	
Certified to William McLaughlin	33 05	
Certified to Neville & Co.	61 75	
Certified to Sacramento Transfer Co.	3 00	
Certified to Frank H. Wing	40 85	
Certified to Union Ice Co.	21 45	
Certified to San Francisco "Post" Co.	6 00	
Certified to E. P. Johnson	39 21	
Certified to James S. Smith	8 40	
Certified to John P. Hughes	3 00	
Certified to C. H. Leadbetter	4 00	
Certified to A. Logan	3 00	
Certified to S. P. McCarty	4 00	
Certified to Buffalo Brewing Co., ice	3 00	
Certified to Louis A. Duhain	18 00	
Certified to Virginia Duhain	9 00	
Certified to Kittie Duhain	17 50	
Balance in fund	3 24	
	\$1,000 00	\$1,000 00
<i>Appropriation for Uniforms for New Companies.</i>		
Amount of appropriation		\$28,000 00
Certified to Schlamm Brothers	\$12,469 73	
Certified to Golden Gate Woolen Manufacturing Company	9,457 55	
Certified to Pioneer Woolen Factory	3,424 70	
Certified to J. M. Litchfield & Co.	1,963 88	
Certified to S. M. Farran	50 00	
Balance in fund	634 14	
	\$28,000 00	\$28,000 00
<i>Appropriation for Uniforms for Old Companies.</i>		
Amount of appropriation		\$22,000 00
Certified to Schlamm Brothers	\$8,046 07	
Certified to Pioneer Woolen Factory	1,335 73	
Certified to George Rosenberg & Son	90 00	
Certified to J. M. Litchfield & Co.	303 50	
Certified to S. M. Farran	12 00	
Certified to W. E. Brown	27 00	
Balance in fund	12,185 70	
	\$22,000 00	\$22,000 00

TABLE B—Continued.

<i>Amount allowed for Armory Rents and other expenses of the National Guard—Forty-first Fiscal Year.</i>		
Amount of appropriation.....		\$106,275 00
Certified to Commanding Officer Division, N. G. C.....	\$600 00	
Certified to Commander First Brigade.....	635 00	
Certified to Commander Second Brigade.....	2,908 75	
Certified to Commander Third Brigade.....	660 00	
Certified to Commander Fourth Brigade.....	660 00	
Certified to Commander Fifth Brigade.....	210 00	
Certified to Commander Sixth Brigade.....	90 00	
Certified to Commander First Infantry.....	1,240 00	
Certified to Commander Second Artillery.....	840 00	
Certified to Commander Third Infantry.....	868 75	
Certified to Commander Fifth Infantry.....	780 00	
Certified to Commander Sixth Infantry.....	780 00	
Certified to Commander Seventh Infantry.....	810 00	
Certified to Commander Eighth Infantry.....	202 50	
Certified to Commander Ninth Infantry.....	240 65	
Certified to Commander Tenth Infantry.....	60 00	
Certified to Commander First Artillery.....	780 00	
Certified to Commander San Francisco Hussars.....	2,151 22	
Certified to Commander Company A, First Infantry.....	1,551 22	
Certified to Commander Company B, First Infantry.....	1,551 22	
Certified to Commander Company C, First Infantry.....	1,551 22	
Certified to Commander Company D, First Infantry.....	1,551 22	
Certified to Commander Company F, First Infantry.....	1,551 22	
Certified to Commander Company G, First Infantry.....	1,551 22	
Certified to Commander Company H, First Infantry.....	1,551 22	
Certified to Commander Cadet Company, First Infantry.....	83 33	
Certified to Commander Company A, Second Artillery.....	2,751 22	
Certified to Commander Company C, Second Artillery.....	1,551 22	
Certified to Commander Company D, Second Artillery.....	1,551 22	
Certified to Commander Company E, Second Artillery.....	1,551 22	
Certified to Commander Company F, Second Artillery.....	1,551 22	
Certified to Commander Company G, Second Artillery.....	1,551 22	
Certified to Commander Company H, Second Artillery.....	1,551 22	
Certified to Commander Company A, Third Infantry.....	1,551 22	
Certified to Commander Company B, Third Infantry.....	1,551 22	
Certified to Commander Company C, Third Infantry.....	1,551 22	
Certified to Commander Company D, Third Infantry.....	1,533 83	
Certified to Commander Company E, Third Infantry.....	1,551 22	
Certified to Commander Company F, Third Infantry.....	1,551 22	
Certified to Commander Company G, Third Infantry.....	1,551 22	
Certified to Commander Company H, Third Infantry.....	775 00	
Certified to Commander Company A, Fifth Infantry.....	1,551 22	
Certified to Commander Company B, Fifth Infantry.....	1,551 22	
Certified to Commander Company C, Fifth Infantry.....	1,551 22	
Certified to Commander Company D, Fifth Infantry.....	1,551 22	
Certified to Commander Company E, Fifth Infantry.....	1,551 22	
Certified to Commander Company F, Fifth Infantry.....	1,551 22	
Certified to Commander Company A, Sixth Infantry.....	1,551 22	
Certified to Commander Company B, Sixth Infantry.....	1,551 22	
Certified to Commander Company C, Sixth Infantry.....	1,551 22	
Certified to Commander Company D, Sixth Infantry.....	1,600 00	
Certified to Commander Company E, Sixth Infantry.....	1,587 50	
Certified to Commander Company F, Sixth Infantry.....	1,600 00	
Certified to Commander Company A, Seventh Infantry.....	1,551 22	
Certified to Commander Company B, Seventh Infantry.....	1,475 00	
Certified to Commander Company C, Seventh Infantry.....	1,559 13	
Certified to Commander Company D, Seventh Infantry.....	1,475 00	
Certified to Commander Company E, Seventh Infantry.....	675 00	
Certified to Commander Company F, Seventh Infantry.....	1,564 92	
Certified to Commander Company G, Seventh Infantry.....	1,579 16	
Certified to Commander Company A, Eighth Infantry.....	1,551 22	
Certified to Commander Company B, Eighth Infantry.....	1,600 00	
Certified to Commander Company C, Eighth Infantry.....	800 00	
Certified to Commander Company D, Eighth Infantry.....	800 00	
Certified to Commander Company E, Eighth Infantry.....	800 00	
Certified to Commander Company A, Ninth Infantry.....	1,237 50	
Certified to Commander Company B, Ninth Infantry.....	876 22	
Certified to Commander Company C, Ninth Infantry.....	800 00	
Amounts carried forward.....	\$86,226 31	\$106,275 00

TABLE B—Continued.

Amounts brought forward.....	\$86,226 31	\$106,275 00
Certified to Commander Company D, Ninth Infantry.....	883 33	
Certified to Commander Company E, Ninth Infantry.....	891 67	
Certified to Commander Company F, Ninth Infantry.....	800 00	
Certified to Commander Company A, Tenth Infantry.....	1,551 22	
Certified to Commander Company B, Tenth Infantry.....	800 00	
Certified to Commander Company A, First Artillery.....	1,551 22	
Certified to Commander Company B, First Artillery.....	2,751 22	
Certified to Commander Company C, First Artillery.....	1,551 22	
Certified to Commander Company E, First Artillery.....	1,551 22	
Certified to Commander Company F, First Artillery.....	1,551 22	
Certified to Commander Company G, First Artillery.....	1,551 22	
Certified to Colonel J. W. Guthrie, Examining Board, Fourth Brigade.....	101 45	
Certified to Colonel David Wilder, Examining Board, Second Brigade.....	180 86	
Certified to Lieutenant W. B. Maydwell.....	9 60	
Certified to Lieutenant-Colonel L. S. Butler, Examining Board, First Brigade.....	118 10	
Certified to Lieutenant-Colonel E. H. McKee.....	8 60	
Certified to James S. Smith.....	65 00	
Certified to Colonel T. F. Barry.....	57 50	
Certified to Major H. T. Batchelder, Examining Board, Fifth Brigade.....	45 00	
Certified to Geo. C. Shreve & Co.	254 00	
Certified to Colonel Eugene Lehe	27 50	
Certified to Chas. I. Lorbeer.....	18 64	
Overdraft in fortieth fiscal year returned to Treasury	2,017 39	
Balance in fund	1,711 51	
	\$106,275 00	\$106,275 00

STATE OF CALIFORNIA, }
County of Sacramento. } ss.

Richard H. Orton, Adjutant-General of California, being duly sworn, says: That the amounts certified to in the foregoing tables, under the head of postage and expressage, and cleaning and transportation of arms, traveling and contingent expenses of the Adjutant-General's office, were expended for the purposes above mentioned, to the best of his knowledge and belief.

RICHARD H. ORTON,
Adjutant-General of California.

Subscribed and sworn to before me this twenty-fifth day of October, 1890.

[SEAL.]

J. S. WILLIAMS,
Deputy Clerk Supreme Court.

TABLE C.
MILITARY PROPERTY OF THE STATE.

PROPERTY.	Military Property of the State at last Report.....	In State Armory August 31, 1890	In Possession of the National Guard of California and Military Colleges	Accounted for by Affidavit—Expended in Service and Lost.....	Total Military Property of the State August 31, 1890
Light 12-lb guns	4	—	4	—	4
10-lb Parrott guns	6	—	6	—	6
12-lb howitzers	2	—	2	—	2
Carriages and limbers, 12-lbs	6	—	6	—	6
Carriages and limbers, 10-lbs	6	—	6	—	6
Caissons	10	—	10	—	10
Sponges and rammers	12	—	12	—	12
Spare wheels	6	—	6	—	6
Spare poles	4	—	3	1	3
Forges	2	—	1	1	1
Battery wagons	1	—	1	—	1
Wheel harness	20	—	12	8	12
Lead harness	34	—	12	22	12
Axes (felling)	3	—	4	—	4
Sponge buckets	16	—	6	10	6
Tar buckets	18	—	7	11	7
Water buckets	20	—	21	—	21
Handspikes	12	—	15	—	15
Gunners' haversacks	32	—	16	16	16
Gunners' gimlets	5	—	10	—	10
Lanyards	12	—	12	—	12
Linstocks	4	—	4	—	4
Vent covers	12	—	6	6	6
Priming wires	22	—	9	13	9
Prolongs	12	—	7	5	7
Tarpaulins	10	—	10	—	10
Tangent scales	5	—	—	5	—
Thumbstalls	12	—	5	7	5
Tow hooks	12	—	—	12	—
Tube punches	15	—	8	7	8
Vent punches	10	—	5	5	5
Wormers	5	—	—	5	—
Worm and staves	2	—	3	—	3
Gunners' pinchers	10	—	—	10	—
Sponge covers	26	—	16	10	16
Gunners' hammers	12	—	—	12	—
Leg guards	6	—	13	—	13
Saddles	200	55	126	19	181
Saddle blankets	35	—	—	35	—
Saddle bags	21	20	—	1	21
Bridles	300	55	157	88	212
Breast straps and plates	286	—	—	286	—
Martingales	100	17	83	—	100
Halters	28	24	10	—	34
Nose bags	69	—	16	53	16
Gatling guns, cal. 45	6	—	8	—	8
Gatling gun carriages	6	—	8	—	8
Adjusting screw wrenches	6	—	4	2	4
Extractors for H. C. shells	4	—	—	4	—
Handspikes, trail	4	—	4	—	4
Pin wrenches	6	—	—	6	—
Wiping rods	6	—	—	6	—
Gun covers	4	—	4	—	4
Springfield rifles, cal. 45	2,835	130	3,657	—	3,787
Bayonets	2,835	42	3,817	—	3,859
Screwdrivers	3,387	200	2,120	1,067	2,120
Spring vises	164	64	100	—	164
Tumbler punches	750	50	500	200	550

TABLE C—Continued.

PROPERTY.	Military Property of the State at last Report.	In State Armory August 31, 1890.	In Possession of the National Guard of California and Military Colleges.	Accounted for by Affidavit—Expended in Service and Lost.	Total Military Property of the State August 31, 1890.
Breech block cap screws	483			483	
Bridles	88	20	157		177
Bridle screws	88			88	
Cam latch springs	466	50	50	366	100
Ejector springs	633	40	160	433	200
Ejector spindles	306			306	
Extractors	168	60	100	8	100
Firing pins	368	68	100	200	168
Firing pin screws	477	40	60	377	100
Main springs	736	30	176	530	206
Sear springs	777	70	100	607	170
Sear screws	118	20		98	20
Tumbler screws.	644	40		604	40
Wiping rods	11	60	140		200
Breech blocks.	24	4	20		24
Springfield carbines, cal. 45.	240		218	22	218
Brushes and thongs.	61			61	
Colt's revolvers	6		6		6
S. Smith & Wesson revolvers, cal. 45	100		108	10	118
Main springs	10	10			10
Trigger springs	10			10	
Barrel catch springs	10			10	
Stop springs	10			10	
Pawl springs	10			10	
Extractor springs	10	10			10
Sabers	134		170		170
Saber belts and plates	199		217		217
Cartridge boxes and plates	1,887	42	4,283		4,325
Cartridge belts and plates	1,278		3,876		3,876
Waist belts and plates	1,621		4,293		4,293
Gun slings	416		895		895
Drums	2		56		56
Drum sticks	16		112		112
Springfield rifles.	200	103	164		267
Bench vise	1	1			1
Ball cartridges.	110,000	118,000	126,000	126,000	118,000
Arm chests	60		115		115
Uniform coats	2,420		4,293		4,293
Uniform pants	1,548		4,466		4,466
Uniform helmets	847		3,764		3,764
Uniform caps	866		2,787		2,787
Blouses	1,077		3,303		3,303
Tents, with poles, etc.	270	40	274		314
Hats			187		187
Blankets			248		248
Overcoats			370		370
Crossbelts for bayonets			417		417
Knapsacks			483		483
Frogs			325		325
Sergeant swords			7		7
Guidon flag			1		1
Carbin boots			65		65
Telescopes			4		4
Binoculars			8		8
Heliographs			2		2
Telescope holders			8		8
Flying torches			2		2
Foot torches			2		2
Flags			9		9
Camp chests			7		7
Haverlocks			23		23

TABLE C—Continued.

PROPERTY.	Military Property of the State at last Report.	In State Armory August 31, 1890.	In Possession of the National Guard of California, and Military Colleges.	Accounted for by Affidavit—Expended in Service and Lost.	Total Military Property of the State August 31, 1890.
Canteens.....			108		108
Tin plates.....			36		36
Tin cups.....			36		36
Knives and forks.....			132		132
Spoons.....			78		78
Chairs.....			111		111
Desks and tables.....			8		8
Stoves.....			5		5
Artillery sabers.....			64		64
Artillery scabbards.....			64		64
Foot artillery sword.....			1		1
Bugles.....			3		3
Officers' swords.....			5		5
Officers' belts.....			5		5

TABLE D.

	General Officers and General Staff.	Signal Service	Cavalry	Artillery	Infantry	Total
<i>Commissioned Officers—General and Staff.</i>						
Major-Generals	1					1
Brigadier-Generals	1					1
Aids-de-Camp	22					22
Adjutant-General's Department	8					8
Inspectors-General	15					15
Judge-Advocate's Department	8					8
Ordnance Department	1					1
Quartermaster's Department	7					7
Subsistence Department	7					7
Medical Department	8					8
Pay Department	8					8
Engineers	8					8
Signal Department	7					7
<i>Commissioned Officers—Line.</i>						
Colonels				2	6	8
Lieutenant-Colonels				2	7	9
Majors				2	8	10
Surgeons				2	8	10
Ordnance Department				2	8	10
Regimental Signal Officers				2	8	10
Paymasters				2	8	10
Quartermasters				2	8	10
Commissaries				2	8	10
Inspectors Rifle Practice				2	8	10
Chaplains				2	6	8
Captains			1	13	47	61
First Lieutenants			1	15	47	63
Second Lieutenants			1	13	47	61
Total commissioned	113		3	63	224	403
<i>Enlisted Men.</i>						
Non-Commissioned Officers	9	14	10	152	582	767
Musicians		2	2	67	245	316
Privates		62	41	556	2,159	2,818
Total enlisted	9	78	53	775	2,986	3,901
Aggregate	122	78	56	838	3,210	4,304
Retired officers						82
Total strength						4,386

TABLE E.

THE AVERAGE PERCENTAGE OF ATTENDANCE AND STRENGTH OF THE SEVERAL ORGANIZATIONS OF THE NATIONAL GUARD OF CALIFORNIA,

For the fiscal years ending June 30, 1889 and 1890, based upon the monthly drill reports of Companies.

ORGANIZATION.	Percentage of Attendance, 1889.	Strength June 30, 1889.	Percentage of Attendance, 1890.	Strength June 30, 1890.
First Infantry	73.01	490	72.16	513
Second Artillery	64.94	435	71.13	426
Third Infantry	63.46	465	70.37	519
Fifth Infantry	67.82	397	71.72	385
Sixth Infantry	66.44	410	73.11	383
First Artillery	60.99	406	56.89	367
Seventh Infantry	60.92	432	69.70	332
Eighth Infantry	67.18	119	72.73	310
Ninth Infantry	-----	-----	75.87	363
Tenth Infantry	67.40	76	67.54	144
Signal Corps	71.42	27	70.60	60
S. Francisco Hussars (Cavalry) ..	67.24	63	72.71	67
Total company membership and percentage	66.46	3,320	70.11	3,869

Percentage of attendance 1887, 66.50.

Strength June 30, 1887, 3,149.

Percentage of attendance 1888, 67.60.

Strength June 30, 1888, 3,743.

Total gain over June 30, 1889, 549 men.

TABLE F.

ENROLLED MILITIA FOR THE FISCAL YEARS ENDING JUNE 30, 1888 AND 1889.

Showing by Counties the Number of Persons between the Ages of Eighteen and Forty-five Years liable to Military Duty.

COUNTIES.	1888.	1889.
Alameda	8,377	8,552
Alpine	69	61
Amador	1,492	1,455
Butte	1,942	1,967
Calaveras	1,194	1,092
Colusa	628	1,364
Contra Costa	2,955	3,023
Del Norte	323	324
El Dorado	1,017	1,071
Fresno	2,264	5,164
Humboldt	3,910	3,708
Inyo	461	491
Kern	985	1,002
Lake	624	382
Lassen	346	315
Los Angeles	10,251	11,860
Marin	1,312	1,412
Mariposa	491	478
Mendocino	960	960
Merced	1,002	976
Modoc	598	598
Mono	366	293
Monterey	2,887	2,887
Napa	2,049	1,932
Nevada	1,640	2,181
Placer	1,276	1,480
Plumas	645	690
Sacramento	4,702	5,236
San Benito	1,003	1,003
San Bernardino	2,327	4,724
San Diego	5,732	5,754
San Francisco	40,464	36,261
San Joaquin	6,190	6,483
San Luis Obispo	2,189	2,598
San Mateo	1,242	1,162
Santa Barbara	1,658	1,633
Santa Clara	1,651	1,600
Santa Cruz	2,123	2,825
Shasta	1,178	1,321
Sierra	883	176
Siskiyou	1,029	1,525
Solano	2,496	3,392
Sonoma	2,582	3,140
Stanislaus	635	809
Sutter	678	646
Tehama	1,392	1,710
Trinity	339	386
Tulare	2,131	2,084
Tuolumne	1,015	965
Ventura	1,274	1,363
Yolo	2,220	1,854
Yuba	1,520	1,415
Totals	138,717	142,533
Gain over 1888		3,816

TABLE G.
ROSTER OF OFFICERS OF THE NATIONAL GUARD, AUGUST 31, 1890.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
COMMANDER-IN-CHIEF AND STAFF.				
Robert W. Waterman.	Governor	Commander-in-Chief	Sept. 12, 1887.	Elected 2d Lieut. Co. K, 1st Inf., C. M., upon the organization of that company, Oct. 22, 1861; resigned June, 1862; enlisted in Co. I, 1st Inf., Aug., 1862; Sergt., Sept., 1862; discharged to enter U. S. Army, March 7, 1863; elected 2d Lieut. Co. D, 1st Inf., N. G. C., April 29, 1873; 1st Lieut., Sept. 16, 1874; Capt., Jan. 6, 1875; Major commanding 1st Cav. Battalion, Aug. 14, 1878; placed on retired list by S. O. No. 64, Sept. 14, 1881; elected Maj., 1st Inf., N. G. C., April 10, 1885; Lieut.-Col., May 30, 1885; appointed Adjt.-Gen., with rank of Brig.-Gen., Nov. 1, 1887.
Richard H. Orton.	Brig.-Gen.	Adjt.-General, Quartermaster - General, Commissary - General, Inspector-General, Chief of Ordnance, ex officio Chief of Staff.	Nov. 1, 1887.	<i>Service in other States, and the United States.</i> —Appointed 2d Lieut., Co. F, 1st Cal. Cav., March 7, 1863; promoted 1st Lieut., Jan. 24, 1864; Capt. Co. M, Aug. 14, 1865; served in New Mexico and Texas; was Q. M. and Commander of the return column of Cal. Vols. in 1866, and mustered out at Presidio, Jan. 4, 1867.
Perrie Kewen.	Colonel	Assistant - Adjutant-General.	May 18, 1886.	Cadet Saint Augustine's Military College, Aug., 1875; Corp., Jan. 15, 1876; 1st Sergt., June 1, 1876; enlisted in Battery A (late Battery B), 1st Cal. Guard, 2d Regt. of Artillery, 24 Brig., March 13, 1881; Corp., May 1, 1882; 1st Lieut. (G. O. No. 19), June 26, 1882; Capt. and A. D. C. to Commander, 2d Brig. (G. O. No. 12), Feb. 24, 1883; Col. and Assist. Adjt.-Gen., State of California (G. O. No. 9), May 18, 1886; Acting Adjt.-Gen. from May 22, 1886, to July 15, 1886; reappointed Col. and Assist. Adjt.-Gen. (G. O. No. 2), Jan. 13, 1887; Col. and Assist. Adjt.-Gen. (G. O. No. 35), Nov. 1, 1887.
Isaac Trumbo	Colonel	Chief Engineer.	Nov. 7, 1887.	Appointed Colonel and Chief Engineer, Nov. 7, 1887.
Henry I. Kowalsky	Colonel	Judge-Advocate-Gen'l	Nov. 7, 1887.	Appointed Colonel and Judge Advocate-General, Nov. 7, 1887.
Frank W. Sumner.	Colonel	Paymaster-General	Nov. 7, 1887.	Appointed Colonel and Paymaster-General, Nov. 7, 1887.
James D. Whitney	Colonel	Surgeon-General	Nov. 7, 1887.	Appointed 1st Lieut. and Assist.-Surg., 1st Regt. of Inf., Dec. 17, 1869; term expired Jan. 23, 1878; appointed Colonel and Surg.-Gen., Nov. 7, 1887.
Herman Bendel	Colonel	Inspector-General of Rifle Practice.	Feb. 8, 1887.	Appointed Colonel and Inspector-General of Rifle Practice, Feb. 8, 1887.
				<i>Service in other States, and the United States.</i> —Capt. Co. C, 2d Regt. of Inf., Missouri Vols., from April 23, 1861, to Aug. 31, 1861; Capt. Co. C, 12th Regt. Inf., Missouri Vols., from Sept. 1, 1861, to Sept. 4, 1862; Major 34th Regt. Inf., Missouri Vols., from Sept. 5, 1862, to Nov. 30, 1862.

Albert F. Jones.....	Lieut.-Col.	Aid-de-Camp	Feb. 8, 1887..	Appointed Major and Judge-Advocate, 5th Brig., March 2, 1880; promoted Lieut.-Col. and A. D. C. to Commander-in-Chief, Feb. 8, 1887; reappointed Lieut.-Col. and A. D. C. to Commander-in-Chief, Nov. 7, 1887.
William J. Younger....	Lieut.-Col.	Aid-de-Camp	Feb. 8, 1887..	Second Lieut. Co. E, 1st Inf., March 25, 1887; 1st Lieut., April 13, 1888; term expired, Dec. 19, 1874; appointed 1st Lieut. and Q. M., 1st Inf., May 26, 1877; transferred with same rank to Commissary Department, Jan. 23, 1878; term expired Aug. 13, 1880; appointed Lieut.-Col. and A. D. C. to the Commander-in-Chief, Feb. 8, 1887.
Douglas Gunn	Lieut.-Col.	Aid-de-Camp	Nov. 7, 1887..	Enlisted in Co. B, 1st Inf., 2d Brigade, May 16, 1862; promoted Capt., Oct. 19, 1868; resigned (on account of removal), Nov. 8, 1869 (Ex-empt Certificate issued Oct. 27, 1870); elected Capt. Co. B (unt-attached), 1st Brig., Oct. 12, 1881 (subsequently attached to 7th Inf.); promoted Lieut.-Col. and A. D. C. to Commander-in-Chief, Nov. 7, 1887.
George B. Sperry	Lieut.-Col.	Aid-de-Camp	Nov. 7, 1887..	Appointed Lieut.-Col. and A. D. C. to the Commander-in-Chief, Nov. 7, 1887.
J. B. Wright.....	Lieut.-Col.	Aid-de-Camp	Nov. 7, 1887..	Appointed Lieut.-Col. and A. D. C. to the Commander-in-Chief, Nov. 7, 1887.
Archibald Yell.....	Lieut.-Col.	Aid-de-Camp	June 16, 1888..	Appointed Lieut.-Col. and A. D. C. to the Commander-in-Chief, June 16, 1888.
Richard H. Warfield....	Lieut.-Col.	Aid-de-Camp	Jan. 8, 1889..	Appointed Lieut.-Col. and A. D. C. to the Commander-in-Chief, Jan. 8, 1889.
Harvey L. Drew	Lieut.-Col.	Aid-de-Camp	Sept. 4, 1889..	<i>Service in other States, and the United States.</i> —Enlisted in 50th Regt., N. Y. Vols., Jan. 5, 1864; discharged as 1st Lieut. and Adj., June 13, 1865, close of the war; commissioned 2d Lieut., 54th Regt., 25th Brig., 7th Div., N. G. S. N. Y., Sept. 14, 1863, by Gov. Seymour, and duly mustered in; resigned to enter Union army; was, after the war, commissioned Quartermaster 24th Regt., N. G. S. N. Y., Aug. 9, 1869; commissioned Capt. Co. K, 24th Regt., N. G. S. N. Y., Feb. 6, 1872; resigned to come to California.
MAJOR-GENERAL COM- MANDING DIVISION AND STAFF.				Appointed Lieut.-Col. and A. D. C. to the Commander-in-Chief, Sept. 4, 1889.
William H. Dimond....	Maj.-Gen.	Division	Sept. 28, 1887..	Appointed Lieut.-Col. and A. D. C. to the Commander-in-Chief, Jan. 26, 1880; Brig.-Gen. commanding 2d Brig., Dec. 14, 1881; reappointed Jan. 30, 1883, and Feb. 7, 1887; Maj.-Gen. commanding Division, Sept. 28, 1887.
				<i>Service in other States, and the United States.</i> —Appointed in New York Capt. and Assist. Adj.-Gen., U. S. Vols., March 3, 1865; re- signed July 8, 1865; Capt. of a Cav. Co. in Honolulu, H. I.

TABLE G—Continued.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
Albert E. Castle	Lieut.-Col.	Ordnance Officer	Oct. 6, 1887	Enlisted in Co. F, 2d Artillery, 2d Brig., Aug. 7, 1879; discharged on account of disability, Aug. 25, 1880; enlisted in same company, Dec. 11, 1883; discharged on account of removal, March 1, 1885; appointed Capt. and A. D. C. to commanding officer, 2d Brig., Aug. 4, 1886; Lieut. Col. and Ordnance Officer Division, Oct. 6, 1887; Appointed Lieut.-Col. and Signal Officer Division, May 10, 1889; transferred to Engineer Corps, June 10, 1889, with rank from May 10, 1889.
William E. Holloway	Lieut.-Col.	Engineer Officer	May 10, 1889	<i>Service in other States, and the United States.</i> —Served three years at St. Mary's Military College, Maryland, and commanded the company during the last year.
James W. Staples	Lieut.-Col.	Inspector	Oct. 6, 1887	Enlisted in Co. F, 2d Artillery, N. G. C., April 1, 1878; appointed 1st Lieut. and Paymaster, 2d (Inf.) Artillery, April 3, 1878; resigned July 4, 1880; Major and Quartermaster, 2d Brig., April 26, 1880; Lieut.-Col. and Inspector Division, Oct. 6, 1887.
				<i>Service in other States, and the United States.</i> —Enlisted Dec. 2, 1861, in 78th New York Vol. Inf., 12th Army Corps; Sergt.-Major, April 24, 1862; Capt., Sept. 17, 1862; Acting Assist. Inspector-Gen., Mar. 4, 1863, having participated in the battles of Cedar Mountain, Sulphur Springs, Second Bull Run, and Antietam; resigned April 7, 1863.
Warren B. English	Lieut.-Col.	Quartermaster	Feb. 12, 1883	Appointed Lieut.-Col. and Quartermaster Division, Feb. 12, 1883.
Edgar J. De Pue	Lieut.-Col.	Commissary	Oct. 20, 1887	Appointed Lieut.-Col. and Commissary Division, Oct. 20, 1887.
Sheldon I. Kellogg, Jr.	Lieut.-Col.	Inspector of Rifle Practice.	July 10, 1890	Enlisted in Co. E, 1st Inf., 2d Brig., April 30, 1875; promoted 2d Lieut., June 7, 1875; promoted Major and A. D. C. Division, July 1, 1875; promoted Lieut.-Col. and Assist. Adjt.-Gen. Division, Jan. 1, 1876; resigned May 22, 1876; enlisted in Oakland Light Cav. (unattached), 2d Brig., Sept. 23, 1878; promoted 2d Lieut., Aug. 18, 1879; resigned April 30, 1880; enlisted May 3, 1880; transferred to Co. F, 2d Artillery, 2d Brig., per S. O. No. 3, Hqqs. 2d Brig.; transferred back to Oakland Light Cav., Aug. 22, 1881; appointed 1st Lieut. and Ord. Officer, 5th Inf., 2d Brig., May 30, 1883; Major and Insp. Rifle Practice, 2d Brig., Feb. 17, 1887; Lieut.-Col. and Insp. Rifle Practice Division, July 10, 1890.
Ernest A. Denicke	Lieut.-Col.	Signal Officer	May 23, 1890	<i>Service in other States, and the United States.</i> —Enlisted in Co. A, 23d Regt., National Guard of New York, Oct. 11, 1871; promoted Corporal, Jan. 7, 1874; discharged April 15, 1874.
				Appointed Lieut.-Col. and Division Inspector, Aug. 23, 1870; term expired Sept. 1, 1874; Major and S. O., 2d Brig., May 2, 1887; Lieut.-Col. and Signal Officer Division, May 23, 1890.

M. H. Hecht	Lieut.-Col.	Paymaster	April 21, 1886	<i>Service in other States, and the United States.</i> —Mustered as a private in Co. A, 10th New York Vol. Inf., April, 1861; commissioned 2d Lieut., 68th New York Vol. Inf., Aug. 1, 1861; promoted 1st Lieut., 68th New York Inf., Sept. 30, 1862; Captain, Jan. 7, 1863; commissioned 1st Lieut., Signal Corps, U. S. A., March 3, 1863; Captain, Signal Corps, by brevet, Aug., 1864; Major, Signal Corps, U. S. A., at close of war; mustered out Dec. 20, 1865.
Horace G. Platt	Lieut.-Col.	Judge-Advocate	Oct. 6, 1887	Appointed Major and A. D. C. to the Commander of Division, July 21, 1885; Lieut.-Col. and Paymaster, April 21, 1886; reappointed Oct. 20, 1887.
Joseph R. Laine	Colonel	Surgeon	May 23, 1890	Appointed Major and Judge-Advocate 2d Brig., Nov. 1, 1882; Lieut.-Col. and Judge-Advocate Division, Oct. 6, 1887.
George Whittell	Major	Aid-de-Camp	Oct. 6, 1887	Appointed Col. and Surgeon Division, May 23, 1890. <i>Service in other States, and the United States.</i> —Enlisted in Co. G, 1st Wis. Vol. Inf., Oct., 1861; discharged Jan., 1865; participated in battles Hoover's Gap, Perryville or Chaplin Hills, Stone River, and Chicamauga; was captured (wounded) at latter engagement, and held a prisoner fourteen months at Libby, Danville, and seven months at Andersonville, Ga.; was A. A. Surgeon, U. S. A., in Dept. Platte from spring of 1874 until autumn of 1875.
William B. Hooper	Major	Aid-de-Camp	Oct. 20, 1887	Enlisted in Co. B, 1st Inf., 2d Brig., June 4, 1867; promoted Corp., 1869; honorably discharged, —, 1869; appointed Captain and A. D. C., 2d Brig., April 28, 1885; promoted Major and A. D. C. to Division Commander, Oct. 6, 1887.
FIRST BRIGADE—BRIG-ADIER-GENERAL AND STAFF. Edward P. Johnson	Brig.-Gen.	Commanding	Mar. 7, 1889	Appointed Major and A. D. C. to Division Commander, Oct. 20, 1887. <i>Service in other States, and the United States.</i> —Appointed 2d Lieut., Co. F, and Regtl. Q. M., 2d Cal. Cav., July 23, 1862; promoted 1st Lieut. Co. F, 2d Cal. Cav., Jan. 17, 1863; promoted Capt. and Commissary Substistence, U. S. Vols., March 13, 1863; Brevet Major of same, March 13, 1865; honorably mustered out July 13, 1866.
L. S. Butler	Lieut.-Col.	Assist. Adjt.-Gen.	Sept. 24, 1884	Appointed Brig.-Gen. Commanding 1st Brig., March 7, 1889. <i>Service in other States, and the United States.</i> —Enlisted in Co. K, 68th Indiana Vol. Inf., Aug. 19, 1862; 2d Lieut., June 10, 1863; mustered out June 20, 1865.
Emanuel L. Stern	Major	Brigade Inspector. Ordnance Officer	Mar. 14, 1889	Major and Assist. Adjt.-Gen., 1st Brig., Feb. 8, 1883; resigned, April 7, 1884; Major and Assist. Adjt.-Gen., 1st Brig., Sept. 24, 1884; rank increased by Act of the Legislature to Lieut.-Col., March 20, 1889. <i>Service in other States, and the United States.</i> —Private 7th Ohio Vol. Inf., from May, 1861, to Aug. 24, 1861; reenlisted Nov., 1862, 2d Col. Cav.; after various transfers and promotions in the Departments of the West, of Missouri, and of the Gulf, was honorably discharged Jan. 8, 1867.

TABLE G—Continued.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
Cyrus Willard	Major	Engineer Officer	Oct. 7, 1889	Enlisted in Co. A, 7th Inf., April, 1881; Corp., Dec., 1885; 1st Lieut. and Q. M., 7th Inf., Jan. 1, 1887; Major and Signal Officer, 1st Brig., Feb. 25, 1888; Major and Eng. Officer, Oct. 7, 1889.
G. Wiley Wells	Major	Judge-Advocate	Mar. 14, 1889	Appointed Major and Judge-Advocate, March 14, 1889. <i>Service in other States, and the United States.</i> —Enlisted in the U. S. Army in 1861; served through all grades of commissioned officer up to Lieut.-Col.; was in thirty-five different engagements, wounded once, his horse shot from under him; was breveted for meritorious service by Gen. Sheridan on the field of battle; served six months on the staff of Gen. Foster as A. D. C.; mustered out Feb. 21, 1865, on account of wounds received.
Andrew W. Barrett	Major	Quartermaster	Mar. 14, 1889	Appointed Major and Paymaster, Feb. 25, 1888; term expired June 18, 1888; appointed Major and Quartermaster, March 14, 1889.
George H. Bonebrake	Major	Paymaster	Mar. 14, 1889	Appointed Major and Paymaster, April 16, 1885; resigned March 5, 1888; appointed Major and Paymaster, March 14, 1889. <i>Service in other States, and the United States.</i> —Enlisted in Co. C., 69th Ind. Vols., and elected 2d Lieut., July, 1862; Captain same Co., Aug. 5, 1862; promoted Major, 69th Ind. Vols., Oct. 1, 1863; mustered out Jan. 24, 1865; reappointed Captain and Com., U. S. Vols., March 24, 1865; breveted Major and mustered out Oct. 11, 1865; having served in sixteen battles, and wounded once.
George M. Dannals	Major	Commissary	June 18, 1888	Private, Co. B, 7th Inf., Oct. 12, 1881; 2d Lieut., Oct. 12, 1881; 1st Lieut., June 8, 1882; reelected May 1, 1885; appointed Major and Com'y, 1st Brig., June 18, 1888.
William G. Cochran	Lieut.-Col.	Surgeon	Mar. 14, 1889	Appointed Lieut.-Col. and Surg., 1st Brig., March 14, 1889. <i>Service in other States, and the United States.</i> —Enlisted in Co. B, 94th Regt., Ill. Inf. Vols., Aug., 1862; wounded at the battles of Prairie Grove, Ark., Dec. 7, 1862; discharged on account of wounds, March, 1863; enlisted in Co. K, 145th Rept., Ill. Inf. Vols., May, 1864 (100 days); term expired; discharged Sept., 1864.
Madison T. Owens	Major	Signal Officer	Oct. 7, 1889	Appointed Major and Signal Officer, 1st Brig., Oct. 7, 1889. <i>Service in other States, and the United States.</i> —Lieut.-Col. and A. D. C. to Commander-in-Chief, Iowa National Guard, June 24, 1884; reappointed June 29, 1886; resigned, S. O. No. 10, A. G. O., May 16, 1888.
Horace M. Russell	Major	Inspector Rifle Practice.	Mar. 14, 1889	Major and Judge-Advocate, 1st Brigade, Feb. 25, 1888; term expired, June 20, 1888; Major and Inspector of Rifle Practice, 1st Brigade, March 14, 1889. <i>Service in other States, and the United States.</i> —Enlisted in Co. F, 3d Wis. Cav.; served three years and seven months, 1861 to 1864;

Albert C. Jones Henry Z. Osborn SEVENTH REGIMENT OF INFANTRY — FIELD AND STAFF. Organ- ized May 5, 1888.	Captain Captain	Aid-de-Camp Aid-de-Camp	Mar. 14, 1889. Mar. 14, 1889.	private in National Guard of Colorado, in Captain Cook's com- pany, from 1872 to 1874. Appointed Capt. and A. D. C., March 14, 1889. Appointed Capt. and A. D. C. to Brigade Commander, Mar. 14, 1889. <i>Service in other States, and the United States.</i> —Enlisted in Co. B, 192d New York Vol. Inf., and mustered out with company at Cumberland, Md., Aug. 28, 1895.
Charles C. Allen	Colonel	Commanding	Sept. 20, 1890.	Appointed Major and Inspector 1st Brig., Mar. 14, 1889; elected Col. commanding 7th Regt. of Inf., 1st Brig., Sept. 20, 1890. <i>Service in other States, and the United States.</i> —Commissioned 2d Lieut. and 1st Lieut., 27th Mo. Inf. Vols., 1892; Captain 35th Mo. Inf. Vols., 1892 to 1894; Provost Marshal, St. Louis Dist., 1893, 1894; Colonel 5th Regt. Nat. Guard of Mo., 1893, 1897. Elected 1st Lieut. Pomona City Guard (Independent), April 14, 1896; elected Capt., May 1, 1896; (Co. mustered into service of the State Oct. 28, 1897, as Co. D, 7th Inf., 1st Brig.); commissioned Captain Oct. 28, 1897; Lieut.-Col., 7th Inf., 1st Brig., May 5, 1898. Cadet University of California, 1874 to 1876; private San Bernardino Cav. (unattached), Jan. 10, 1880; Corporal May 28. Enlisted in Co. A, 7th Inf., 1st Brig., April 14, 1892; 1st Lieut. and Ordnance Officer, 7th Inf., Jan. 3, 1895. <i>Service in other States, and the United States.</i> —Enlisted in Co. I, 78th Regt. Ill. Vols., 2d Brig., 2d Division, 14th A. C.
Arthur T. Palmer	Lieut.-Col.		May 5, 1888.	Appointed 1st Lieut. and Com'y, 7th Inf., Jan. 3, 1886. Appointed Maj. and Surg., 7th Inf., June 18, 1888. Appointed in Co. B, 7th Inf., Oct. 12, 1881; Sergt., Oct. 12, 1881; 1st Sergt., June 12, 1882; 2d Lieut., Oct. 19, 1883; 1st Lieut. and Pay- master, 7th Inf., Jan. 3, 1886. <i>Service in other States, and the United States.</i> —Enlisted in Co. K, 7th Ohio N. G., 1877; discharged in 1880. Enlisted in Co. A, 7th Inf., July 11, 1883; 2d Lieut. Cadet Co., 7th Inf., Jan. 20, 1886; (Co. mustered into State service and designated as Co. C, Oct. 20, 1887); elected 2d Lieut., April 16, 1888; 1st Lieut. and Signal Officer, 7th Inf., June 18, 1888. Enlisted in Cadet Co., 7th Inf., 1st Brig., June 9, 1881; Sergt., June 16, 1884; 1st Lieut., Jan. 3, 1886; (Co. mustered as a regular Co., April 18, 1888, and designated Co. C, 7th Inf., 1st Brig.); 1st Lieut., April 18, 1888; Captain and A. D. C. to Commander 1st Brig., June 18, 1888; term expired Mar. 14, 1889; appointed 1st Lieut. and Inspector of Rifle Practice, April 4, 1889.
Isaac Benjamin	Major		May 5, 1888.	Appointed Capt. and Chap., 7th Inf., June 18, 1888.
Thomas M. Plotts	Captain 1st Lieut.	Adjutant Ordnance Officer	Jan. 3, 1886.	
Christopher N. Wilson Everett R. Smith J. M. Van Zandt	1st Lieut. 1st Lieut. Major 1st Lieut.	Quartermaster Commissary Surgeon Paymaster	Jan. 3, 1886. June 18, 1888. Jan. 3, 1886.	
Theodore Frieze	1st Lieut.	Signal Officer	June 18, 1888.	
John Bloeser	1st Lieut.	Inspector Rifle Prac- tice.	April 4, 1889.	
William E. Knighten	Captain	Chaplain	June 18, 1888.	

TABLE G—Continued.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
COMPANY A. Organized June 9, 1881. William G. Schrieber	Captain	Commanding	Sept. 11, 1888	Enlisted in Co. A, 7th Inf., Feb. 21, 1888; Capt., Sept. 11, 1888. <i>Service in other States, and the United States.</i> —Enlisted in Co. I, 1st Inf., Illinois National Guard, Dec. 5, 1884; Sergt., Jan. 26, 1885; 2d Lieut., May 28, 1885; 1st Lieut., July 2, 1885; resigned March 31, 1886; reëlected 1st Lieut., Sept. 16, 1886; resigned, Oct., 1887.
Robert O. Williamson	1st Lieut.		Nov. 27, 1888	Enlisted in Co. A, 7th Inf., N. G. C., July 16, 1884; Sergt., July 7, 1886; 2d Lieut., June 4, 1887; 1st Lieut., Nov. 27, 1888.
James W. McPherson	2d Lieut.		Nov. 27, 1888	Enlisted in Co. A, 7th Inf., April 22, 1884; transferred to Co. C, 7th Inf.; Sergt., Jan. 3, 1886; Sergt.-Major, 7th Inf., May 26, 1887; 2d Lieut. Co. A, 7th Inf., Nov. 27, 1888.
COMPANY B. Organized Dec. 23, 1889. Lawrence Buckley	Captain	Commanding	Dec. 23, 1889	Mustered and elected Captain of Co. B, 7th Inf., Dec. 23, 1889. <i>Service in other States, and the United States.</i> —Enlisted May, 1881, in the 21st Separate Co., State of New York; commissioned 2d Lieut., Sept. 12, 1881; resigned Sept. 15, 1884; commissioned 1st Lieut., Feb. 13, 1885; resigned March, 1887.
Arthur L. Hamilton	1st Lieut.		Dec. 23, 1889	Mustered and elected 1st Lieut., Co. B, 7th Inf., Dec. 23, 1889. <i>Service in other States, and the United States.</i> —Private Co. K, 1st Regt. Inf., 2d Brig., Iowa N. G., July, 1877; mustered out June, 1879; enlisted in Co. D, 2d Regt., I. N. G., March 13, 1884; discharged April, 1885.
James H. Campbell	2d Lieut.		Dec. 23, 1889	Enlisted in Co. B, 7th Inf., Dec. 23, 1889; 2d Lieut., Dec. 23, 1889.
COMPANY C. Organized April 18, 1888. Mindert L. Starin	Captain	Commanding	April 18, 1888	Enlisted in Co. A, 7th Inf., 1st Brig., Sept. 16, 1881; Corp., Jan. 26, 1882; Sergt., Jan. 16, 1884; Capt. provisional Co., Dec. 31, 1884 (Co. mustered into service as a Cadet Co.); commissioned Capt., June 17, 1886. (Co. accepted and mustered as Co. C, 7th Inf., Oct. 26, 1887.) Commissioned Capt. commanding, April 18, 1888.
Theodore Meyer	1st Lieut.		May 21, 1890	Enlisted in Co. C, 7th Inf., Dec. 14, 1884; reëlected Feb. 14, 1888; Corp., Nov. 3, 1886; Sergt., Aug. 22, 1888; 1st Lieut., May 21, 1890.
Arthur G. Reese	2d Lieut.		July 2, 1890	Enlisted in Co. C, 7th Inf., Sept. 26, 1888; Corp., May 8, 1889; Sergt., April 21, 1890; 2d Lieut., July 2, 1890.
COMPANY D. Organized Dec. 30, 1889. Charles E. Elwell	Captain	Commanding	Dec. 30, 1889	Enlisted in Co. E, 5th Inf., 2d Brig., June 10, 1885; discharged June

William R. Stone	1st Lieut.	Dec. 30, 1889.	10, 1888; mustered and elected Capt. Co. D, 7th Inf., 1st Brig., Dec. 30, 1889.
Albert W. Brown	2d Lieut.	Dec. 30, 1889.	Mustered and elected 1st Lieut. Co. D, 7th Inf., Dec. 30, 1889.
COMPANY F. Organized Dec. 20, 1887.			Mustered and elected 2d Lieut. Co. D, 7th Inf., Dec. 30, 1889.
22 Oscar Ragland	Captain	May 19, 1890.	Enlisted in Co. F, 7th Inf., 1st Brig., Dec. 20, 1887; Sergt., July 21, 1888; transferred to Co. E, 9th Inf., Nov. 7, 1888; transferred to Co. F, 7th Inf., April 4, 1889; 2d Lieut., May 13, 1889; 1st Lieut., July 15, 1889; Capt., May 19, 1890.
John B. Franklin	1st Lieut.	May 19, 1890.	Enlisted in Co. F, 7th Inf., Dec. 20, 1887; Corp., July 2, 1888; 1st Sergt., June 20, 1889; 1st Lieut., May 19, 1890.
Louis S. Chapplear	2d Lieut.	Aug. 4, 1890.	Enlisted in Co. F, 7th Inf., 1st Brig., May 27, 1889; 1st Sergt., Feb. 21, 1890; 2d Lieut., Aug. 4, 1890.
COMPANY G. Organized Feb. 20, 1888.			
Samuel O. Wood	Captain	Feb. 20, 1888.	Enlisted in Co. G, 7th Inf., 1st Brig., Feb. 20, 1888; elected Capt., Feb. 20, 1888.
Arthur Lee Lewis	1st Lieut.	Dec. 19, 1889.	Enlisted in Co. G, 7th Inf., Feb. 20, 1888; 2d Lieut., Feb. 20, 1888; 1st Lieut., Dec. 19, 1889.
Ernest Browning	2d Lieut.	Dec. 19, 1889.	Enlisted in Co. G, 7th Inf., 1st Brig., March 3, 1888; Corp., Apr. 3, 1888; Sergt., Jan. 21, 1889; 2d Lieut., Dec. 19, 1889.
NINTH REGIMENT OF INFANTRY. Organized, Feb. 8, 1890.			
Edward B. Spileman	Colonel	Feb. 8, 1890.	Enlisted in Co. A, 9th Inf., 1st Brig., Sept. 7, 1889; elected Capt., Sept. 9, 1889; Col. 9th Inf., Feb. 8, 1890.
George L. Bryant	Lieut.-Col.	Feb. 8, 1890.	Enlisted in Co. G, 1st Art., 4th Brig., Feb. 16, 1885; discharged Jan. 20, 1887; enlisted in Co. E, 7th Inf., 1st Brig., Oct. 29, 1887; 1st Lieut., Oct. 29, 1887; Capt., March 10, 1888; Lieut.-Col., 9th Inf., Feb. 8, 1890.
Charles S. McKelvey	Major	Feb. 8, 1890.	Elected Capt. Co. F, 9th Inf., Jan. 6, 1890; Maj. 9th Inf., Feb. 8, 1890. <i>Service in other States, and the United States.</i> —Enlisted in Co. C, 9th Regt. Inf., I. N. G., Aug. 23, 1881; Sergt., Aug. 15, 1882; transferred to Co. L, 8th Regt. Inf., I. N. G., 1st Sergt., Aug. 23, 1883; Capt., Feb. 6, 1886; served through the R. R. riots at East St. Louis, Ill., during the months of April and May; resigned Sept. 25, 1886.
Rawlins Cadwalader	Captain	Mar. 5, 1890.	Enlisted in Co. F, 9th Inf., Jan. 6, 1890; appointed 1st Lieut. and Ordnance Officer, March 5, 1890.
George E. Foster	1st Lieut.	Mar. 5, 1890.	

TABLE G—Continued.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
James E. Mack	1st Lieut.	Quartermaster	June 18, 1888.	Appointed 1st Lieut. and Q. M., 7th Inf., June 18, 1888; transferred to the 9th Inf., March 26, 1890. <i>Services in other States, and the United States.</i> —Enlisted in Co. E, 14th Mass. Vols., May, 1861, for ninety days; enlisted Feb. 1, 1887, in Co. I, 6th U. S. Cavalry; discharged Oct. 28, 1887; surgeon's certificate for disability.
Charles F. Rice	1st Lieut.	Commissary	Mar. 4, 1890.	
Thomas L. Magee	Major	Surgeon	Mar. 5, 1890.	
John S. Harville	1st Lieut.	Paymaster	Mar. 5, 1890.	
Charles I. Lorbeer	1st Lieut.	Inspector Rifle Practice.	Mar. 5, 1890.	
Alfred W. Birdsall	1st Lieut.	Signal Officer	June 20, 1890.	
Francis B. Perkins	Captain	Chaplain	Mar. 5, 1890.	Enlisted in Co. D, 7th Inf., 1st Brig., Oct. 28, 1887; 2d Lieut., Oct. 28, 1887; 1st Lieut. and Inspector of Rifle Practice 9th Inf., Mar. 5, 1890. Major and Military Instructor Pacific Beach Military College, Jan. 16, 1888; term expired May 26, 1889; appointed 1st Lieut. and Signal Officer 9th Infantry, June 20, 1890. Appointed Captain and Chaplain, Mar. 5, 1890. <i>Service in other States, and the United States.</i> —Chaplain 10th Regt., Mass. Vols., Oct., 1863; term expired July, 1864.
Company A. Organized Sept. 7, 1889.				
Edward E. Spileman	Captain	Commanding	Mar. 13, 1890.	Enlisted in Co. A, 9th Inf., Sept. 7, 1889; 1st Lieut., Sept. 7, 1889; Capt., Mar. 13, 1890.
Arthur G. Hartley	1st Lieut.		Mar. 13, 1890.	Enlisted in Co. A, 9th Inf., 1st Brig., Sept. 7, 1889; 1st Lieut., Mar. 13, 1890.
John R. Berry	2d Lieut.		Mar. 13, 1890.	Enlisted in Co. A, 9th Inf., 1st Brig., Sept. 7, 1889; 2d Lieut., Mar. 13, 1890.
Company B. Organized Oct. 12, 1881.				
Harry M. Schiller	Captain	Commanding	Feb. 14, 1890.	<i>Service in other States, and the United States.</i> —Enlisted in Co. —, Ill. N. G., March 2, 1882; discharged June 19, 1884. Enlisted in Co. B, 7th Inf., 1st Brig., Oct. 12, 1881; Sergt., Oct. 12, 1881; reënlisted Oct. 12, 1884; reënlisted Oct. 12, 1887; 1st Lieut., Jan. 13, 1888; Capt. Co. B, 9th Inf., Feb. 14, 1890.
Harry C. Dannaals	1st Lieut.		Feb. 14, 1890.	Enlisted in Co. B, 9th Inf., 1st Brig., Feb. 28, 1888; Corporal, Feb. 20, 1889; 1st Lieut., Feb. 14, 1890.
George H. Bower	2d Lieut.		July 30, 1888.	Enlisted in Co. B, 9th Inf., 1st Brig., June 27, 1884; reënlisted Sept. 1, 1887; Sergt., July 20, 1888; 2d Lieut., July 30, 1888.
Company C. Organized Jan. 3, 1890.				
James M. Keith	Captain	Commanding	Jan. 3, 1890.	Enlisted in Co. C, 9th Inf., Jan. 3, 1890; Capt., Jan. 3, 1890. <i>Service in other States, and the United States.</i> —Enlisted in N. G. of Mass., June, 1871; Corp., Sergt., 2d Lieut., Aug., 1874, Co. I, 3d Inf.; transferred to 1st Inf. in 1875; 1st Lieut., May 4, 1877; Capt., Feb. 14, 1881; resigned Dec. 3, 1884.

Harry La V. Twining.....	1st Lieut.....	Jan. 3, 1890.....	Enlisted in Co. C, 9th Inf., 1st Brig., Jan. 3, 1890; 1st Lieut., Jan. 3, 1890.
Samuel R. Langworthy COMPANY D. Organ- ized Oct. 28, 1887.	2d Lieut.....	Jan. 3, 1890.....	<i>Service in other States, and the United States.</i> —Enlisted in "Monroe City Guard," Wis. N. G., July 22, 1882; discharged April 22, 1884. Enlisted in Co. C, 9th Inf., 1st Brig., Jan. 3, 1890; promoted 2d Lieut., Jan. 3, 1890.
James A. Drifill.....	Captain.....	Nov. 24, 1888.....	1st Lieut. Co. D, 7th Inf., 1st Brig., June 30, 1888; Capt., Nov. 24, 1888; Co. transferred to 9th Inf., Feb. 8, 1890.
James L. Howland.....	1st Lieut.....	Nov. 24, 1888.....	Enlisted in Co. D, 7th Inf., 1st Brig., Oct. 28, 1887; 1st Sergt., Feb. 1, 1888; 1st Lieut., Nov. 24, 1888; Co. transferred to 9th Inf. Regt., Feb. 8, 1890.
William O. Welch.....	2d Lieut.....	May 13, 1890.....	Enlisted in Co. D, 7th Inf., 1st Brig., Oct. 28, 1887; Corp., Feb. 1, 1888; Sergt., Aug. 22, 1888; 1st Sergt., March 20, 1889; 2d Lieut., May 13, 1890; Co. transferred to 9th Inf., Feb. 8, 1890.
COMPANY E. Organ- ized Oct. 29, 1887.			
Noble A. Richardson.....	Captain.....	Mar. 10, 1890.....	Enlisted in Co. E, 7th Inf., 1st Brig., Oct. 29, 1887; Sergt., Feb. 1, 1888; 1st Lieut., Oct. 29, 1888; Capt., March 10, 1890; Co. transferred to 9th Inf., Feb. 8, 1890.
George W. Thomas.....	1st Lieut.....	Mar. 10, 1890.....	Enlisted in Co. E, 7th Inf., 1st Brigade, Oct. 29, 1887; Sergt., Feb. 1, 1888; 2d Lieut., Oct. 29, 1888; 1st Lieut., March 10, 1890; company transferred to 9th Inf., Feb. 8, 1890.
Earl M. Ducoe.....	2d Lieut.....	Mar. 10, 1890.....	Enlisted in Co. E, 7th Inf., 1st Brig., Oct. 29, 1887; Corp., July 20, 1888; Sergt., Mar. 20, 1889; 1st Sergt., Apr. 20, 1889; 2d Lieut., Mar. 10, 1890.
COMPANY F. Organ- ized Jan. 6, 1890.			
Henry T. Matthews.....	Captain.....	Mar. 17, 1890.....	Enlisted in Co. F, 9th Inf., 1st Brig., Jan. 6, 1890; 1st Lieut., Jan. 6, 1890; Capt., Mar. 17, 1890.
			<i>Service in other States, and the United States.</i> —Enlisted in Co. C, 9th Inf., 2d Brig., Ill. N. G., Oct., 1884 (afterwards Co. L, 8th Inf.); served as private in same during strike and railroad riots in East St. Louis, during spring of 1886; honorably discharged as 3d Sergt. at muster out of company, Feb. 1888.
Nathan A. Ulm.....	1st Lieut.....	Mar. 17, 1890.....	Enlisted in Co. F, 9th Inf., 1st Brig., Jan. 6, 1890; 2d Lieut., Jan. 6, 1890; 1st Lieut., March 17, 1890.
Charles D. Ball.....	2d Lieut.....	Mar. 17, 1890.....	Enlisted in Co. F, Jan. 6, 1890; Corporal, April 17, 1890; 2d Lieut., March 17, 1890.
SECOND BRIGADE— BRIGADIER-GENERAL AND STAFF.			
John T. Cutting.....	Brig.-Gen.....	Sept. 28, 1887.....	Appointed Major and Ord. Officer, 2d Brig., Jan. 10, 1882; Col. 2d Art., Dec. 17, 1885; Brig.-Gen. commanding 2d Brig., Sept. 28, 1887. <i>Service in other States, and the United States.</i> —Enlisted in Chicago Mercantile Battery, Jan. 4, 1864; mustered out July 10, 1865.

TABLE G—Continued.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
William Edwards	Lieut.-Col.	Assist. Adjt.-Gen.	Aug. 29, 1888	Appointed Capt. and A. D. C. to the commanding officer, 2d Brig., April 28, 1888; Major and Q. M., 2d Brig., April 17, 1889; Lieut.-Col. and Assist. Adjt.-Gen., 2d Brig., August 29, 1889.
A. D. Cutler	Major	Inspector	Oct. 28, 1887	Appointed 1st Lieut. and Ord. Officer, 2d Art., 2d Brig., May 26, 1886; Major and Q. M., 2d Brig., Oct. 28, 1887; transferred to Inspector's Dept. with rank of Major, March 9, 1888.
Charles T. Stanley	Major	Ordinance Officer	Feb. 7, 1890	<i>Service in other States, and the United States.</i> —Enlisted in Co. B, 6th Mass. Inf., and served July Aug., Sept., and Oct., 1884; private, 1st Lieut., Capt., Mass. Vol. Militia, 1874-5 and 6.
Richard P. Hammond, Jr.	Major	Engineer Officer	Dec. 24, 1887	Enlisted in Co. B, 3d Inf., 2d Brig., May 22, 1885; 2d Lieut., May 22, 1885; Capt. and A. D. C. to commander 2d Brig., Oct. 28, 1887; Major and Ord. Officer, 2d Brig., Feb. 7, 1890.
John N. E. Wilson	Major	Judge-Advocate	Oct. 28, 1887	Appointed 1st Lieut. and Ord. Officer, 3d Inf., Nov. 10, 1883; Major and Ord. Officer, 2d Brig., Dec. 24, 1885; transferred to Engineer Dept. with the rank of Major, April 30, 1888.
Victor D. Duboce	Major	Quartermaster	Feb. 7, 1890	1st Lieut. University of California Cadets, May 20, 1876; appointed Major and Judge-Advocate, 2d Brig., Oct. 28, 1887.
William Cluff	Major	Commissary	Oct. 28, 1887	Appointed 1st Lieut. and Com'y, March 13, 1884; Major and Com'y, 2d Brig., Oct. 28, 1887.
George C. Pardee	Lieut.-Col.	Surgeon	Aug. 15, 1890	Enlisted in Oakland Guard (unattached), 2d Brig., in 1873; discharged in 1876; Cadet 1st Lieut., University of California, 1879; elected 2d Lieut. Co. A, 5th Inf., 2d Brig., Aug. 12, 1885; 1st Lieut., May 24, 1888; Capt., Aug. 8, 1889; Lieut.-Col. and Surgeon, 2d Brig., Aug. 15, 1890.
John F. Burgin	Major	Inspector of Rifle Practice.	Aug. 11, 1890	Appointed Sergt.-Major, 5th Inf., Mar. 28, 1888; 1st Lieut. and Ord. Officer, Oct. 19, 1888; Major and Inspector of Rifle Practice, 2d Brig., Aug. 11, 1890.
James D. Phelan	Major	Paymaster	Oct. 28, 1887	Appointed Lieut.-Col. and A. D. C. to Commander-in-Chief, Feb. 8, 1887; resigned Sept. 28, 1887; Maj. and P. M., 2d Brig., Oct. 28, 1887.
David E. Miles	Major	Signal Officer	June 5, 1890	Served four years University Cadets, private, Corp., Sergt., 1st Sergt. Sergt.-Major, Captain and Adjt., and graduated Major; retired June, 1886; and Aid-de-Camp, 2d Brig., Feb. 7, 1890.
George D. Boyd	Captain	Aid-de-Camp	Feb. 7, 1890	Enlisted in Oakland Light Cav. (unattached), 2d Brig., March 21, 1881; Corp., May 21, 1881; Sergt., Dec. 14, 1882; 1st Lieut. and Q. M., 3d Inf., 2d Brig., July 11, 1883; Capt. and Aid-de-Camp, 2d Brig., June 5, 1890.
William D. Lawton	Captain	Aid-de-Camp	June 5, 1890	

First Regiment of Infantry--FIELD AND STAFF. Organized May 8, 1861.	Colonel	Commanding	June 28, 1880	Enlisted in Co. B, 1st Inf., April 1, 1877; Captain, April 5, 1877; re-elected, 1879; Col., 1st Inf., June 28, 1880; reelected, June 30, 1884, and July 11, 1888.
Samuel J. Taylor	Lieut.-Col.		Jan. 11, 1888	Enlisted in Co. B, 1st Inf., N. G. C., March 31, 1880; Corp., Aug. 27, 1880; Sergt., Jan. 31, 1881; 1st Lieut., June 27, 1881; Capt., March 2, 1882; reelected April 4, 1884; Major, 1st Inf., Sept. 21, 1885; Lieut.-Col., Jan. 11, 1888.
William P. Sullivan, Jr.	Major		Jan. 11, 1888	Enlisted in Co. H, 3d Inf., 2d Brig., Dec. 2, 1878; 1st Sergt., Jan. 10, 1880 (letter of Co. changed to C, then transferred to 1st Inf. as Co. A, in Aug., 1881); elected 1st Lieut., Aug. 29, 1881; reelected, Aug. 29, 1883; Capt. and Adjt., 1st Inf., Aug. 7, 1885; Major, 1st Inf., Jan. 11, 1888.
Robert W. Burtis	Captain	Adjutant	Sept. 21, 1889	Appointed 1st Lieut. and Ord. Officer, 1st Inf., 2d Brig., June 14, 1888; Capt. and Adjt., Sept. 21, 1889.
William A. Halsted	1st Lieut.	Ordinance Officer	July 12, 1890	Enlisted in Light Battery A (late D), 2d Art., March 29, 1880; discharged, Jan. 31, 1882; appointed 1st Lieut. and Ord. Officer, 1st Inf., July 12, 1890.
Edward C. Hughes	1st Lieut.	Quartermaster	April 16, 1883	Appointed 1st Lieut. and Q. M., 1st Inf., N. G. C., April 16, 1883.
Thomas M. Cluff	1st Lieut.	Commissary	June 22, 1887	Appointed 1st Lieut. and Ord. Officer, 1st Inf., June 22, 1887; transferred to Subsistence Department, Feb. 25, 1888.
Louis A. Phillips	1st Lieut.	Paymaster	June 30, 1886	Cadet, University of California, 1871; appointed 1st Lieut. and Paymaster, 1st Inf., 2d Brig., June 30, 1886.
George M. Terrill	Major	Surgeon	Feb. 4, 1888	Appointed Major and Surg., 1st Inf., 2d Brig., Feb. 4, 1888. <i>Service in other States, and the United States.</i> —Acting Assist. Surg., U. S. Army, from Oct. 15, 1886, to Oct. 15, 1886; Dept. of Arizona; on field duty in pursuit of hostile Apaches.
George H. Strong	1st Lieut.	Inspector of Rifle Practice.	Dec. 6, 1879	Enlisted in Co. E, 1st Inf., 2d Brig., Feb. 25, 1867; service continuous; 1st Lieut. and Insp. of Rifle Prac., 1st Inf., Dec. 6, 1879. <i>Service in other States, and the United States.</i> —Enlisted and served one year, 1866; 7th Mass. State Militia.
William E. Brown	1st Lieut.	Signal Officer	Nov. 25, 1889	Enlisted in Co. G, 1st Inf., 1st Brig., Feb. 16, 1885; transferred to Regt. Signal Corps, 1st Inf., June 22, 1887; transferred to Co. B, 1st Inf., April 1, 1889; transferred to 2d Brig. Signal Corps, April 1, 1889; Corp., Regt. Signal Corps, June 1, 1887; Sergt., Regt. Signal Corps, April 2, 1888; 1st Sergt., Brig. Signal Corps, May 21, 1889; 1st Lieut., Signal Officer, 1st Inf., 2d Brig., Nov. 25, 1889.
	Captain	Chaplain		

TABLE G—Continued.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
COMPANY A. Organized Mar. 7, 1871.				
Robert A. Marshall	Captain	Commanding	Mar. 14, 1887.	Enlisted in Co. A, 1st Inf., 2d Brig., Aug. 22, 1881; Sergt., June 8, 1885; 1st Lieut., Sept. 14, 1885; Captain, March 14, 1887.
Joseph T. O'Brien	1st Lieut.		Mar. 15, 1889.	Enlisted in Co. A, 1st Inf., 2d Brig., Nov. 10, 1884; Sergt. Co. A, Dec. 30, 1885; 2d Lieut., March 14, 1887; 1st Lieut., March 15, 1889.
Engene V. Sullivan	2d Lieut.		Mar. 15, 1889.	Enlisted in Co. A, 1st Inf., April 28, 1884; Corp., Sept. 1, 1885; Sergt., Dec. 30, 1885; reenlisted April 28, 1887; 2d Lieut., March 15, 1889.
COMPANY B. Organized May 31, 1854.				
George R. Burdick	Captain	Commanding	Oct. 22, 1885.	Enlisted in Co. B, 1st Inf., 2d Brig., April 18, 1877; Sergt., Sept. 8, 1877; reenlisted April 19, 1880; 1st Sergt., Nov. 13, 1880; reenlisted April 19, 1883; honorably discharged June 7, 1884; elected Capt. Co. B, 1st Inf., 2d Brig., Oct. 22, 1885; reelected Capt., Nov. 10, 1887.
Irvin B. Cook	1st Lieut.		May 19, 1887.	Enlisted in Co. B, 1st Inf., March 31, 1880; Sergt.; reenlisted March 31, 1883; and April 1, 1886; 1st Lieut., May 19, 1887.
F. A. Baldwin	2d Lieut.		Jan. 28, 1886.	Enlisted Sept., 1879; term expired Nov. 6, 1882; enlisted July 9, 1885; 2d Lieut., Jan. 28, 1886; resigned Oct. 5, 1888; elected 2d Lieut., Co. B, 1st Inf., Oct. 28, 1889.
COMPANY C. Organized Aug. 31, 1855.				
John E. Klein	Captain	Commanding	Jan. 5, 1885.	Private Co. C, 1st Inf., July 21, 1873; Corp., Jan. 3, 1876; Sergt., June 18, 1877; 1st Sergt., Feb. 10, 1881; 2d Lieut., March 6, 1882; 1st Lieut., June 5, 1882; reelected June 9, 1884; Capt., Jan. 5, 1885; reelected January 5, 1887.
Homer H. Woodruff	1st Lieut.		Jan. 10, 1887.	Enlisted in Co. C, 1st Inf., June 14, 1886; 1st Lieut., Jan. 10, 1887.
Andrew J. Ruddock	2d Lieut.		Mar. 3, 1890.	Enlisted in Co. C, 1st Inf., March 29, 1880; Corp., July 1, 1882; reenlisted March 29, 1883; Sergt., Nov. 5, 1883; Q. M. Sergt., Oct. 1, 1884; reenlisted March 29, 1886; 2d Lieut., March 3, 1890.
COMPANY D. Organized June 15, 1861.				
Charles Jansen	Captain	Commanding	Oct. 27, 1886.	Enlisted in Co. C, 1st Inf., May 29, 1882; Corp., July 1, 1882; Sergt., April 12, 1883; Capt. Co. D, 1st Inf., Oct. 27, 1886.
Edward A. Lindberg	1st Lieut.		Nov. 6, 1889.	Enlisted in Co. D, 1st Inf., 2d Brig., April 3, 1883; Corp., July 8, 1884; Sergt., June 5, 1887; 2d Lieut., Nov. 23, 1887; 1st Lieut., Nov. 6, 1889.
Edward H. Gielow	2d Lieut.		April 9, 1890.	Enlisted in Co. D, 2d Art., 2d Brig., July 2, 1884; Corp., April 1, 1887; Sergt., Oct. 8, 1888; 1st Sergt., Jan. 2, 1889; 2d Lieut., April 9, 1890.
COMPANY F. Organized Dec. 9, 1858.				
	Captain	Commanding		

James A. Margo	1st Lieut.	-----	Mar. 9, 1890	Enlisted in Co. A, 1st Inf., Aug. 22, 1881; transferred to Co. F, Nov. 29, 1882; Corp., May 21, 1885; 1st Sergt., 1st Inf. Drum Corps, Aug. 10, 1885; Com'y Sergt., Non-Com. Staff, same Regt., Jan. 29, 1888; 2d Lieut., Co. F, 1st Inf., June 6, 1889; 1st Lieut., Mar. 6, 1890. Enlisted in Co. F, 1st Inf., July 17, 1885; Corp., May 1, 1887; reenlisted Aug. 2, 1888; Sergt., Sept. 1, 1888; 2d Lieut., March 9, 1890.
J. Frank Eggert COMPANY G. Organ- ized Jan. 9, 1879.	2d Lieut.	-----	Mar. 9, 1890	
Charles Lee Tilden	Captain	-----	Sept. 17, 1883	Enlisted in Co. C, 1st Inf., 2d Brig., March 22, 1880; Corp., Jan. 11, 1882; 2d Lieut. Co. G, May 11, 1882; Capt., Sept. 17, 1883; reelected Capt., Oct. 5, 1885; reelected Capt., Sept. 25, 1887.
Charles E. Thompson	1st Lieut.	-----	Mar. 25, 1889	Enlisted in Co. C, 1st Inf., N. G. C., March 6, 1876; reenlisted March 5, 1879, March 5, 1882, March 5, 1885; Corp., July 1, 1880; Sergt., April 1, 1881; transferred to Co. G, 1st Inf., April 11, 1882; 1st Sergt., May 20, 1882; 2d Lieut., March 14, 1887; 1st Lieut., March 25, 1889.
Edgar C. Suttleff COMPANY H. Organ- ized Sept. 7, 1869.	2d Lieut.	-----	Mar. 25, 1889	Graduated from State University in June, 1878, as Capt. University Battalion; enlisted in Co. G, 1st Inf., 2d Brig., Dec. 20, 1886; Corp., Nov. 1, 1887; 2d Lieut., March 25, 1889.
Hyman P. Bush	Captain	-----	April 12, 1872	Enlisted in Co. H, 1st Inf., June 3, 1870; 1st Lieut., July 1, 1870; Capt., April 12, 1872; reelected April 17, 1874, May 15, 1876, April 18, 1878, April 15, 1880, April 3, 1882, April 21, 1884, March 12, 1888. <i>Service in other States, and the United States.</i> —U. S. Sanitary Com- mission, 1864 to 1867; enlisted in Co. K, 8th Inf., N. G. S. N. Y., 1868-1869.
William H. Fraser	1st Lieut.	-----	April 21, 1884	Enlisted in Co. H, 1st Inf., Sept. 15, 1869; reenlisted Sept. 15, 1875; 1st Sergt., —; reenlisted Dec. 5, 1878; 2d Lieut., May 15, 1882; 1st Lieut., April 21, 1884.
Edward G. Eisen CADET COMPANY. Or- ganized Dec. 15, 1886.	2d Lieut.	-----	June 18, 1889	Enlisted in Co. H, 1st Inf., Nov. 20, 1879; Corp., March 31, 1881; Sergt., July 1, 1881; 1st Sergt., June 30, 1885; 2d Lieut., June 18, 1889.
Eugene L. Cutting	Captain	-----	Aug. 31, 1889	Enlisted in Cadet Co., Oct. 10, 1887; Corp., Feb. 1, 1888; Sergt., April 23, 1889; Capt., Aug. 31, 1889.
Edwin Weil	1st Lieut.	-----	Aug. 31, 1889	Enlisted in Cadet Co., Oct. 10, 1887; Corp., Sept. 11, 1888; 1st Lieut., Aug. 31, 1889.
Walter R. Rountree	2d Lieut.	-----	Feb. 28, 1890	Enlisted in Cadet Co., Sept. 26, 1888; Corp., May 1, 1889; 1st Sergt., Aug. 1, 1889; 2d Lieut., Feb. 28, 1890.

TABLE G—Continued.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
SECOND REGIMENT OF ARTILLERY—FIELD AND STAFF.*				
William Macdonald	Colonel	Commanding	May 23, 1889.	Enlisted in Co. F, 2d (Inf.) Art., 2d Brig., April 3, 1878; Corp., Nov. 3, 1880; Capt. and A. D. C. to commander 2d Brig., Nov. 23, 1880; term expired Jan. 31, 1882; enlisted in Light Battery (B) A, 2d Art., 2d Brig., Feb. 1, 1882; Corp., May 1, 1882; 2d Lieut., June 26, 1882; 1st Lieut., Feb. 20, 1883; Lieut.-Col., 2d Art., 2d Brig., Oct. 20, 1887; Col., May 23, 1889. <i>Service in other States, and the United States.</i> —Enlisted in Co. F, 71st Regt., New York State Militia, during 1857; was promoted Corp. in 1858; honorably discharged April 1, 1860.
John A. Koster	Lieut.-Col.		Mar. 20, 1889.	Appointed Capt. and A. D. C. to commander 2d Brig., Oct. 28, 1887; Maj. and Assist. Adj.-Gen., 2d Brig., Mar. 9, 1888; rank increased Lieut.-Col., Mar. 20, 1889; elected Lieut.-Col., 2d Art., July 25, 1889, with rank from Mar. 20, 1889. <i>Service in other States, and the United States.</i> —Private German Art. (unattached), S. C. Vol. troop, 4th Brig., 1883; transferred to German Art. Cadets, 4th Brig., S. C. V. T.; commissioned Capt., Dec. 20, 1883; resigned May 1, 1884.
Dennis Geary	Major		May 23, 1889.	Elected 1st Lieut. Light Battery A, 2d Art., Mar. 16, 1888; Major 2d Art., May 23, 1889.
Charles C. Fisher	Captain 1st Lieut.	Adjutant Ordnance Officer	Dec. 27, 1887.	Enlisted in Light Battery A, 2d Art., Jan. 2, 1882; Corp., May 1, 1882; Junior 2d Lieut., Feb. 20, 1883; Senior 2d Lieut., May 19, 1884; 1st Lieut. and Ord. Officer, 2d Art., Dec. 27, 1887. See retired officers.
James N. Pike	1st Lieut.	Quartermaster	May 10, 1890.	Appointed 1st Lieut. and Com'y, 2d Art., May 10, 1890.
Frank A. Vail	1st Lieut.	Commissary	Dec. 20, 1887.	Appointed Maj. and Surg., 2d Art., Dec. 20, 1887.
William D. McCarthy	Major	Surgeon		Appointed 1st Lieut. and Paymaster, 2d Art., Jan. 1, 1886.
J. G. Giesting	1st Lieut.	Paymaster	Jan. 1, 1886.	<i>Service in other States, and the United States.</i> —Enlisted in Co. B, 108th Ohio Vol. Inf., Feb. 10, 1865; discharged Aug. 1, 1866, close of war.
Frederick A. Kuhls	1st Lieut.	Inspector Rifle Practice.	May 4, 1887.	Enlisted in Co. C, 2d Art., March 25, 1880; reenlisted March 25, 1883, March 22, 1886; appointed 1st Lieut. and Inspector of Rifle Practice, 2d Art., May 4, 1887.
Charles J. Evans	1st Lieut.	Signal Officer	June 6, 1890.	University Cadets, 1884-6; enlisted in Co. F, 5th Inf., 2d Brig., May 30, 1887; transferred to 5th Regt. Sig. Corps, May 30, 1887; Corp., Jan. 9, 1888; Sergt., May 31, 1888; transferred to Co. F, 5th Inf., April 15, 1889; transferred to 2d Brig. Sig. Corps, April 15, 1889;

Robert Mackenzie LIGHT BATTERY A. Or- ganized July 27, 1849. Hugh Toland Sime	Captain	Chaplain	Aug. 1, 1886	Sergt., May 21, 1889; corps' Q. M. Sergt., Nov. 25, 1889; reenlisted June 3, 1890; 1st Lieut. and Sig. Officer, 2d Art., June 6, 1890. Appointed Capt. and Chaplain, 2d Art., Aug. 1, 1886.
Albert Behneman	Captain	Commanding	July 20, 1885	Enlisted in Co. C, 1st Inf., July 1, 1875; reenlisted June 15, 1878, and July 1, 1881; served as Corp. and Sergt.; 2d Lieut., June 5, 1882; 1st Lieut. and Insp. of Rifle Practice, 2d Art., July 12, 1883; Capt., Light Battery A, 2d Art., July 20, 1885; reelected Aug. 17, 1887. Enlisted in Light Battery A, 2d Art., 2d Brig., April 1, 1887; promoted 2d Lieut., March 16, 1888; 1st Lieut., Aug. 1, 1890.
Charles S. Russell	1st Lieut.		Aug. 1, 1890	<i>Service in other States, and the United States.</i> —Enlisted in Light Battery F, 4th U. S. Art., July 26, 1877; discharged as 1st Sergt. at Fort Warren, Mass., July 25, 1882; enlisted in Co. C, 9th Regt., New Jersey N. G., Aug., 1883. Created hon. member on account of removal.
Fred. M. Speyer BATTERY C. Organ- ized Nov. 27, 1871. Adolph Huber	1st Lieut.		Aug. 1, 1890	Enlisted in Light Battery A, 2d Art., 2d Brig., Jan. 18, 1886; Corp., Dec. 10, 1888; reenlisted Jan. 21, 1889; Sergt., June 5, 1890; 1st Lieut., Aug. 1, 1890.
Charles Buxton	2d Lieut.		Aug. 1, 1890	Enlisted in San Francisco Hussars (unattached), 2d Brig., Sept. 1, 1884; reenlisted Sept. 20, 1886; transf'd to Light Battery A, 2d Art., 2d Brig., Mar. 31, 1887; Corp., June 5, 1890; 2d Lieut., Aug. 1, 1890.
William H. Wessling BATTERY D. Organ- ized May 28, 1868. A. B. C. Dohrmann	Captain	Commanding	Dec. 1, 1884	Enlisted in Co. C, 2d (Inf.) Art., 2d Brig., May 22, 1876; Corp., Apr. 8, 1878; reenlisted May 22, 1879; Sergt., May 22, 1879; reenlisted May 22, 1882; 1st Lieut., Jan. 15, 1883; Capt., Dec. 1, 1884; reelected Dec. 13, 1886.
Alfred J. Kelleher	1st Lieut.		Dec. 17, 1888	Enlisted in Battery C, 2d Art., 2d Brig., Aug. 4, 1884; Corp., Dec. 7, 1885; Sergt., May 18, 1887; reenlisted Aug. 4, 1887; 1st Lieut., Dec. 17, 1888.
	2d Lieut.		Jan. 28, 1889	Enlisted in Battery C 2d Art., Nov. 5, 1883; Corp., Dec. 1, 1885; Q. M. Sergt., May 18, 1887; 2d Lieut., Jan. 28, 1889.
	Captain	Commanding	Jan. 29, 1890	Enlisted in Cadet Co., 2d Art., Aug. 28, 1883; reenlisted Aug. 28, 1884, 1885, 1886; Corp., July 9, 1885; Sergt., Jan. 8, 1886; 1st Lieut., May 27, 1887; resigned May 10, 1888; enlisted in Battery D, 2d Art., May 23, 1888; elected 1st Lieut., June 6, 1888; Capt., Jan. 29, 1890.
	1st Lieut.		Jan. 29, 1890	Enlisted in Battery G, 2d Art., March 13, 1880; Corp., Feb. 25, 1881; Sergt., Aug. 6, 1881; reenlisted March 13, 1883; discharged Aug. 31, 1883; appointed Com'y-Sergt., 2d Artillery, Sept. 8, 1888; Ord.-Sergt., Aug. 10, 1889; 1st Lieut. Co. D, 2d Artillery, Jan. 29, 1890.

* Organized as Second Regiment of Infantry, and reorganized as an Artillery Regiment, June 1, 1881.

TABLE G—Continued.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
Henry L. Batchelder.	2d Lieut.		Jan. 29, 1890.	Enlisted in Battery F, 2d Inf., Feb. 2, 1880; Corp., 2d Regt. Drum Corps, Dec., 1881; Sergt., Feb. 4, 1884; 1st Sergt., Dec. 1, 1885; returned to Battery F, 2d Artillery (formerly 2d Inf.), March 11, 1887; appointed Q. M. Sergt., Non-Com. Staff, 2d Artillery, Feb. 3, 1888; elected 2d Lieut. Battery D, 2d Artillery, Jan. 29, 1890.
Thomas J. Lennon.	Captain	Commanding	April 1, 1890.	Enlisted in Light Battery E, 2d Artillery, 2d Brigade, Jan. 11, 1887; Corp., —, 1887; 2d Lieut., Dec. 6, 1887; 1st Lieut., Aug. 14, 1888; Capt., April 1, 1890.
Thos. J. Cunningham.	1st Lieut.		April 1, 1890.	Enlisted in Light Battery E, 2d Artillery, 2d Brigade, Sept. 28, 1886; Corp., —, 1887; Sergt., April 12, 1888; 2d Lieut., May 21, 1889; 1st Lieut., April 1, 1890.
BATTERY F, Organized Mar. 18, 1878.	2d Lieut.			
James A. White.	Captain	Commanding	Sept. 18, 1888.	Enlisted in Battery F, 2d Art., May 11, 1880; reënlisted May 4, 1883; Sergt., 1883; 2d Lieut., March 26, 1886; 1st Lieut., May 19, 1886; reëlected June 14, 1887; Capt., Sept. 18, 1888.
James A. Maguire.	1st Lieut.		Dec. 4, 1888.	Enlisted in Light Battery F, 2d Regt. Art., 2d Brig., Sept. 30, 1884; discharged Feb. 10, 1888; elected 1st Lieut., Dec. 4, 1888.
Charles F. Kinsman.	2d Lieut.		May 20, 1890.	Enlisted in Light Battery F, 2d Regt. Art., 2d Brig., Dec. 7, 1886; reënlisted Dec. 7, 1889; 2d Lieut., May 20, 1890.
BATTERY G, Organized April 8, 1878.				
Thomas F. O'Neil.	Captain	Commanding	Aug. 29, 1888.	Enlisted in Co. H, 2d (Inf.) Art., Aug. 6, 1875; Corp., 1877; Sergt., Sept. 2, 1879; R. G. Guide (rank 1st Sergt.), 2d Art., Sept. 14, 1880; 1st Sergt., Battery H, 2d Art., July 10, 1882; 2d Lieut., March 9, 1883; reëlected April 10, 1885; 1st Lieut., Battery G, 2d Art., Aug. 20, 1886; Capt., Aug. 29, 1888.
John A. Vanni.	1s Lieut.		Aug. 11, 1890.	Enlisted in Battery G, 2d Regt. Art., 2d Brig., March 21, 1886; Battery Q. M. Sergt., July 12, 1886; 1st Sergt., July 23, 1887; 1st Lieut., Aug. 11, 1890.
BATTERY H, Organized Aug. 7, 1863.	2d Lieut.			
William D. Waters.	Captain	Commanding	Mar. 9, 1883.	Enlisted in Co. K (S. F. Cadets), 2d (Inf.) Art., 2d Brig., Oct. 30, 1863; Corp., Dec., 1863; Sergt., 1864; (Letter of Co. changed to H, Sept. 9, 1866); 1st Sergt., 1867; 1st Lieut., May 24, 1871; term expired and reënlisted June 4, 1873; 1st Sergt., May 7, 1877; 1st Lieut., June 27,

John H. Leo.....	1st Lieut.	Jan. 9, 1889.	1879; reflected June, 1881; Capt., March 9, 1883; reflected March 10, 1886; reflected April 6, 1887.
Francis H. Kenny.....	2d Lieut.	Jan. 9, 1889.	Private Battery H, 2d Art., March 6, 1880; Corp., June 10, 1881; Sergt., April 2, 1883; 2d Lieut., Nov. 10, 1886; 1st Lieut., Jan. 9, 1889.
THIRD REGIMENT OF INFANTRY—FIELD AND STAFF. Organ- ized, June 21, 1883.			Enlisted in Battery H, 2d Regt. Art., March 2, 1887; Corp., May 1, 1888; Sergt., —, 1888; 2d Lieut., Jan. 9, 1889.
Thomas F. Barry.....	Colonel	Jan. 18, 1890	University Cadet, 1870; Capt., July 2, 1874; appointed Major and A. D. C. Division, Sept. 1, 1874, upon recommendation of the Faculty of the University, as a mark of honorable distinction; resigned Sept. 1, 1875; Major, 3d Inf., April 18, 1884; Lieut.-Col., April 28, 1888; Col., Jan. 18, 1890.
Jeremiah O'Connor.....	Lieut.-Col.	Jan. 18, 1890	Elected Capt. Co. D, 3d Inf., April 18, 1883; reflected June 17, 1885; Major, 3d Inf., April 28, 1888; Lieut.-Col., Jan. 18, 1890.
John J. O'Brien.....	Major	Jan. 18, 1890	Appointed 1st Lieut. and Inspector of Rifle Practice, 3d Inf., July 11, 1883; elected Major, 3d Inf., Jan. 18, 1890.
P. M. Dolany.....	Captain	July 1, 1883.	Appointed Capt. and Adjt., 3d Inf., July 1, 1883.
John E. Millar.....	1st Lieut.	Feb. 15, 1886.	Appointed 1st Lieut. and Ord. Officer, 3d Inf., Feb. 15, 1886.
John J. Dwyer.....	1st Lieut.	Mar. 24, 1889.	Enlisted in Co. D, 3d Inf., 2d Brig., Oct. 12, 1885; 1st Lieut., March 24, 1886; transferred to Pay Dept., April 25th; transferred to Q. M. Dept., Aug. 26, 1890.
Thomas I. Dillon.....	1st Lieut.	June 1, 1887	Enlisted in Co. B, 3d Inf., May 22, 1885; 1st Lieut. Co. B, May 22, 1885; 1st Lieut. and Paymaster, 3d Inf., June 1, 1887; transferred to Subsistence Department, April 25, 1890.
Jerome Hughes.....	Major	Mar. 31, 1890.	-----
Thomas Drady.....	1st Lieut.	Aug. 1, 1888.	-----
B. P. Oliver.....	1st Lieut.	July 11, 1883.	Appointed 1st Lieut. and Paymaster, 3d Inf., 2d Brig., July 11, 1883; transferred to Sig. Corps, with same rank, June 1, 1887.
Rev. Thomas Larkin.....	Captain	May 1, 1871.	Appointed Capt. and Chaplain, 3d Inf., May 1, 1871; retired with rank from May 1, 1871; reappointed from retired list, June 21, 1890.
COMPANY A. Organ- ized April 18, 1883.			
Daniel Foley.....	Captain	Mar. 22, 1890	Enlisted in Co. A, 3d Inf., April 18, 1883; appointed 1st Sergt., April 18, 1883; 1st Lieut., Feb. 5, 1886; Capt., March 22, 1890.
Miles J. Bolger.....	1st Lieut.	Mar. 22, 1890	Capt. Co. F, 3d Inf., April 18, 1883; company disbanded (S. O. No. 31), Aug. 30, 1883; 2d Lieut., Co. A, 3d Inf., April 23, 1885; 1st Lieut., March 22, 1890.
Patrick J. Hagan.....	2d Lieut.	Mar. 22, 1890	Enlisted in Co. A, 3d Inf., April 2, 1884; Corp., 1887; reenlisted April 2, 1887; Sergt., April 1, 1889; 2d Lieut., March 22, 1890.

TABLE G—Continued.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
COMPANY B. Organized May 22, 1885.				
Edward H. Kennedy	Captain	Commanding	Mar. 15, 1888	Elected 1st Lieut. Co. E, 3d Inf., Jan. 10, 1887; Capt., Co. B, 3d Inf., March 15, 1888.
James T. Burns	1st Lieut.		Sept. 10, 1888	Enlisted in Cadet Co., 3d Inf., 2d Brig., June 7, 1886; 2d Lieut., July 12, 1886; elected 1st Lieut. Co. B, 3d Inf., 2d Brig., Sept. 10, 1888.
Emil A. Kehrlein	2d Lieut.		Jan. 27, 1890	Enlisted in Co. B, 3d Inf., 2d Brig., June 24, 1884; reenlisted July 23, 1887; 2d Lieut., Jan. 27, 1890.
COMPANY C. Organized April 18, 1863.				
Henry Levy	Captain	Commanding	April 18, 1883	Enlisted in Co. F, 1st Inf., July 11, 1871; served as Sergt.; term expired, Nov. 2, 1874; enlisted in Co. B, 2d Inf., Nov. 20, 1877; transferred to Co. A, 5th Inf.; 2d Lieut., April 24, 1879; Capt., April 22, 1880; term expired Apr. 29, 1882; Capt. Co. C, 3d Inf., Apr. 18, 1883.
Martin Ryan	1st Lieut.		April 18, 1883	Elected 1st Lieut. Co. C, 3d Inf., April 18, 1883; reenlisted April 21, 1885, and May 21, 1887.
Daniel Crowley	2d Lieut.		Jan. 4, 1887	Enlisted in Co. C, 3d Inf., April 18, 1883; Corp., April 18, 1883; Sergt., March 2, 1886; 2d Lieut., Jan. 4, 1887.
COMPANY D. Organized April 18, 1883.				
William M. Sullivan	Captain	Commanding	Aug. 28, 1889	Elected 2d Lieut. Co. F, 3d Inf., April 28, 1884; 1st Lieut., June 30, 1884; reenlisted Sept. 20, 1886; Capt. Co. D, 3d Inf., Aug. 28, 1889.
Edward Fitzpatrick	1st Lieut.		June 8, 1890	Enlisted in Co. B, 3d Inf., July 16, 1883; transferred to Co. D, May 21, 1885; reenlisted July 17, 1886; Corp., Oct. 22, 1886; Sergt. Co. D, Jan. 1, 1889; reenlisted July 17, 1889; 2d Lieut., Aug. 28, 1889; 1st Lieut., June 8, 1890.
John F. Murphy	2d Lieut.		June 8, 1890	Enlisted in Co. D, 3d Inf., March 14, 1888; Corp., Feb. 16, 1890; 2d Lieut., June 8, 1890.
COMPANY E. Organized April 18, 1883.				
Edward I. Sheehan	Captain	Commanding	Aug. 13, 1886	Enlisted in Co. E, 3d Inf., 2d Brig., July 6, 1883; reenlisted July 16, 1886; Capt., Aug. 13, 1886.
Thomas Tierney	1st Lieut.		May 18, 1888	Enlisted in Co. E, 3d Inf., Feb. 25, 1887; Sergt., June 1, 1887; 1st Lieut., May 18, 1888.
August Brenner	2d Lieut.		May 18, 1888	Enlisted in Co. E, 3d Inf., Feb. 21, 1887; Corp., June 1, 1887; 2d Lieut., May 18, 1888.
COMPANY F. Organized Sept. 24, 1883.				
James F. Smith	Captain	Commanding	June 30, 1884	Elected 2d Lieut., Co. F, 3d Inf., Sept. 24, 1883; 1st Lieut., April 23, 1884; Capt., June 30, 1884; reenlisted Sept. 20, 1886.

Frank W. Warren	1st Lieut.	April 7, 1890	Elected 2d Lieut., Co. F, 3d Inf., June 30, 1884; reelected Sept. 20, 1886; 1st Lieut., April 7, 1890.
COMPANY G, Organized March 2, 1886.	2d Lieut.		
Daniel J. Driscoll	Captain	Mar. 2, 1885	Elected Captain Co. G, 3d Inf., Mar. 2, 1885.
John P. White	1st Lieut.	May 21, 1889	Enlisted in Co. G, 3d Inf., March 2, 1885; Corp., March 2, 1885; 2d Lieut., Feb. 15, 1887; 1st Lieut., May 21, 1889.
Charles W. Ozias	2d Lieut.	May 21, 1889	Enlisted in Co. G, 3d Inf., 2d Brig., Oct. 18, 1887; Sergt., May 1, 1888; 2d Lieut., May 21, 1889.
COMPANY H, Organized Jan. 7, 1890.			
Samuel J. Ruddell	Captain	Jan. 7, 1890	1st Lieut. Co. G, 3d Inf., April 11, 1885; Captain Cadet Co., July 12, 1886; company disbanded Mar. 31, 1889; Captain Co. H Jan. 7, 1890.
Peter T. Riley	1st Lieut.	Feb. 20, 1890	Enlisted in Co. H, 3d Inf., 2d Brig., Jan. 7, 1890; 1st Lt., Feb. 20, 1890.
James A. Brown	2d Lieut.	Feb. 20, 1890	Enlisted in Co. H, 3d Inf., 2d Brig., Jan. 7, 1890; 2d Lt., Feb. 20, 1890.
FIFTH REGIMENT OF INFANTRY — FIELD AND STAFF, Organized, Nov. 26, 1887.			
Dolphes B. Fairbanks	Colonel	April 26, 1890	Enlisted in Co. C, 5th Inf., Oct. 10, 1882; Capt., Oct. 10, 1882; reelected, June 15, 1885; Major 5th Inf., Feb. 8, 1888; Lieut.-Col., Oct. 26, 1889; Col., April 26, 1890.
Albert K. Whifton	Lieut.-Col.	April 26, 1890	Enlisted in Co. B, 5th Inf., 2d Brig., March 9, 1882; 2d Lieut., Dec. 13, 1882; Captain, Dec. 3, 1883; reelected Captain, Feb. 27, 1886; Major 5th Inf., Oct. 23, 1889; Lieut.-Col., April 26, 1890.
Frank R. O'Brien	Major	April 26, 1890	Enlisted in Oakland Light Cav., June 8, 1885; Corp., Aug. 10, 1885; Sergt. Co. F, 5th Inf., July 17, 1886; 2d Lieut., June 13, 1887; Maj. and Military Instructor, California Military Academy; Capt. Co. F, 5th Inf., July 15, 1889; Major 5th Inf., April 26, 1890.
Hilan B. Gaston	Captain	May 15, 1890	Enlisted in Co. A, 5th Inf., Sept. 2, 1886; Corp., March 10, 1887; 2d Lieut., May 24, 1888; Captain and Adj., 5th Inf., May 15, 1890.
J. S. L. Parsons	1st Lieut.	May 15, 1888	<i>Services in other States, and the United States</i> —Served in Co. G, 2d Regt., Dakota N. G., 1885-1886; disch'd on account of removal. Enlisted in the Oakland Light Cav. (unattached), 2d Brig., July 5, 1885; Corp., July 20, 1886; transferred to Signal Corps, 5th Inf., 2d Brig., June 26, 1887; Sergt., June 26, 1887; 1st Lieut. and Signal Officer, 5th Inf., May 15, 1888; transferred to Ord. Dept., Sept. 23, 1890, as 1st Lieut. and Ordnance Officer.
Charles L. Bigelow	1st Lieut.	Jan. 5, 1885	Appointed 1st Lieut. and Q. M., 5th Inf., Jan. 5, 1885. <i>Service in other States, and the United States</i> .—Enlisted in 4th Bat., Me. Vols., Jan. 1, 1862; served in McClellan's Div., and others; served one year in an independent company in Maine.

TABLE G—Continued.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
Fred. S. Potts, Jr.	1st Lieut.	Commissary	June 30, 1890	
William G. Mizner	Major	Surgeon	June 30, 1890	
D. A. Smith	1st Lieut.	Paymaster	April 26, 1888	Enlisted as Sergt.-Major, 5th Inf., May 20, 1887; 1st Lieut. and Paymaster, 5th Inf., April 26, 1888.
Charles E. Singley	1st Lieut. 2d Lieut.	Signal Officer	Mar. 5, 1888	Enlisted in Co. C, 5th Inf., 2d Brig., Aug. 1, 1887; promoted 2d Lieut., March 5, 1888.
Osgood C. Wheeler	Captain	Chaplain	Aug. 13, 1883	Appointed Capt. and Chaplain, 5th Inf., Aug. 13, 1883.
Company A. Organized Sept. 1, 1861.				
Albert L. Smith	Captain 1st Lieut.	Commanding	Aug. 8, 1889	Enlisted in the Oakland Guard, Co. A, 5th Inf., Nov. 20, 1879; Sergt.-Maj., 5th Inf., Feb. 18, 1880; 1st Lieut. and Adj., May 17, 1880; rank increased by Act of Legislature to Capt., March 4, 1881; resigned April 29, 1882; Capt. Co. A, 5th Inf., April 29, 1882; appointed Capt. and Adj., 5th Inf., March 1, 1883; retired with rank from March 4, 1881; elected from the retired list 1st Lieut., Co. A, 5th Inf., Aug. 8, 1889.
Company B. Organized Aug. 30, 1863.	2d Lieut.			
Charles A. Hagan	Captain	Commanding	Dec. 26, 1889	Enlisted in Co. B, 5th Inf., 2d Brig., March 25, 1882; Corp., Feb. 11, 1884; reenlisted March 26, 1885; Sergt., April 2, 1886; 1st Lieut., Feb. 24, 1887; Capt., Dec. 26, 1889.
Edward B. Lewis	1st Lieut.		Dec. 26, 1889	Enlisted in Co. B, 5th Inf., May 9, 1882; reenlisted March 23, 1885, May 27, 1888; Corp., Jan. 31, 1883; Sergt., Feb. 11, 1887; 1st Sergt., July 1, 1888; 1st Lieut., Dec. 26, 1889.
Milton Loryea	2d Lieut.		Dec. 26, 1889	Enlisted in Co. B, 5th Inf., March 13, 1882; reenlisted March 23, 1885, May 10, 1888; Sergt., Jan. 17, 1887; Q. M. Sergt., Sept. 30, 1886; 2d Lieut., Dec. 26, 1889.
Company C. Organized June 29, 1869.				
Bright B. Hinslaw	Captain	Commanding	July 28, 1890	Enlisted in Co. C, 5th Inf., July 7, 1890; Capt., July 28, 1890.
Edward L. Emmons	1st Lieut.		July 28, 1890	<i>Services in other States, and the United States.</i> —Two years as a cadet in the U. S. Military Academy at West Point, New York.
John T. Stone	2d Lieut.		July 28, 1890	Enlisted in Co. C, 5th Inf., Nov. 9, 1885; Corp., June 8, 1887; reenlisted Nov. 9, 1888; Sergt., Feb. 1, 1889; 2d Lieut., April 7, 1890; 1st Lieut., July 28, 1890.

COMPANY D, Organized May 14, 1885.				1888; reenlisted March 10, 1888; reduced to ranks at his own request, Jan. 25, 1890; 2d Lieut., July 28, 1890.
William Elliott	Captain	Commanding	Nov. 15, 1889	Enlisted in Co. D, 5th Inf., 2d Brig., May 14, 1886; 2d Lieut., May 14, 1885; 1st Lieut., Nov. 15, 1889.
John P. Davenport	2d Lieut.		Sept. 13, 1889	Enlisted in Co. D, 5th Inf., May 14, 1885; Corp., June 30, 1887; Q. M. Sergt., June 30, 1888; 2d Lieut., Sept. 13, 1889.
COMPANY E, Organized June 10, 1885.				
Louis W. Juilliard	Captain	Commanding	May 30, 1887	Enlisted in Co. E, 5th Inf., 2d Brig., June 10, 1885; 1st Lieut., Nov. 16, 1885; Capt., May 30, 1887.
Henry W. Hudson	1st Lieut.		May 30, 1887	Enlisted in Co. E, 5th Inf., 2d Brig., June 10, 1885; 2d Lieut., Jan. 1, 1886; 1st Lieut., May 30, 1887.
John Dunbar	2d Lieut.		May 30, 1887	Enlisted in Co. E, 5th Inf., 2d Brig., March 10, 1886; 2d Lieut., May 30, 1887.
COMPANY F, Organized Sept. 23, 1878.				
John F. Hayes	Captain	Commanding	July 7, 1890	<i>Service in other States, and the United States.</i> —Enlisted in National Guard, Nevada, in 1872; discharged in 1875.
Edwin G. Hunt	1st Lieut.		July 7, 1890	Enlisted in Co. F, 5th Inf., Jan. 18, 1886; Corp., July 20, 1886; Sergt., July 26, 1887; 2d Lieut., March 19, 1888; 1st Lieut., Nov. 5, 1888; Capt., July 7, 1890.
George H. Wethern	2d Lieut.		July 7, 1890	Enlisted in Co. F, Aug. 10, 1885; Corp., July 17, 1886; Sergt., Nov. 7, 1887; 2d Lieut., Feb. 18, 1889; 1st Lieut., July 7, 1890.
SAN FRANCISCO HUSSARS (unattached). Organized Dec. 6, 1869.				
Charles C. Keene	Captain	Commanding	Nov. 29, 1876	Enlisted in Co. F, 5th Inf., June 27, 1887; Corp., Jan. 1, 1888; Sergt., Dec. 27, 1888; reenlisted June 30, 1890; 2d Lieut., July 7, 1890.
George P. Thomas	1st Lieut.		Jan. 15, 1860	Enlisted in Ellsworth Rifles, Co. K, 1st Inf., 1861; 2d Lieut., Oct. 8, 1862; 1st Lieut., Oct. 20, 1862; resigned 1868; elected Jun. 2d Lieut. S. F. Hussars (Cav. troop), Nov. 25, 1868; Sen. 2d Lieut., Nov. 30, 1870; 1st Lieut., Dec. 4, 1872; reelected Nov. 25, 1874; Capt., Nov. 26, 1876; reelected Dec., 1878, Nov. 24, 1880, Nov. 29, 1882, Nov. 19, 1884, Nov. 22, 1886, Nov. 28, 1888.
John M. Brunsen	2d Lieut.		July 2, 1880	Enlisted in the S. F. Hussars (unattached), 2d Brig., Feb. 10, 1886; Corp., March 16, 1887; Sergt., Dec. 12, 1888; reenlisted Dec. 12, 1888; 1st Lieut., Jan. 15, 1890.
THIRD BRIGADE—BRIGADIER-GENERAL AND STAFF.				
James H. Budd	Brig.-General	Commanding	June 15, 1887	Enlisted in S. F. Hussars (unattached), 2d Brig., Feb. 15, 1888; 2d Lieut., July 2, 1890.
				1st Lieut. University Cadets, July 6, 1873; Major 6th Inf., Aug. 20, 1885; Brig.-Gen. commanding 3d Brig., June 15, 1887.

TABLE G—Continued.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
William M. Gibson	Major	Asst. Adjt.-Gen.	June 24, 1887	University Cadets, from 1871 to 1873; enlisted in Stockton Guard (unattached), 3d Brig., March 30, 1875; Major and Ord. Officer, 3d Brig., May 29, 1875; resigned Mar. 4, 1877 (S. O. No. 3); appointed Maj. and A. D. C. to commander Div., March 29, 1878; appointed Maj. and Inspector, 3d Brig., Feb. 26, 1880; Maj. and Assist. Adjt.-Gen., Aug. 21, 1882; retired, per S. O. No. 38, June 24, 1885; detailed as Adjt., 6th Inf., Oct. 16, 1885; and relieved Mar. 29, 1887; appointed Maj. and Assist. Adjt.-Gen., 3d Brig., June 24, 1887.
Benj. R. Woodworth	Major	Brig. Inspector	Nov. 20, 1886	Captain and A. D. C., 3d Brig., Aug. 1, 1885; Maj. and Q. M., Nov. 20, 1886; transferred to Inspector's Department, Oct. 2, 1888.
Charles H. Dohrmann	Major	Ordinance Officer	Aug. 1, 1885	Enlisted as a private in Union Guard, June 13, 1864; honorably discharged on account of removal, Sept. 27, 1865; enlisted in Oakland Guard, Aug. 30, 1866; honorably discharged Sept. 9, 1867; enlisted in Stockton Lt. Art., Sept. 9, 1867; mustered out with company, June 16, 1868; appointed Capt. and A. D. C. to the commanding officer, 3d Brig., Dec. 9, 1878; Major and Ord. Officer, Aug. 1, 1885.
James E. Hughes	Major	Engineer	Nov. 6, 1889	Major and Engineer, 3d Brig., Feb. 2, 1888; resigned July 26, 1889; reappointed Nov. 6, 1889.
S. D. Woods	Major	Judge-Advocate	Nov. 20, 1886	Appointed Major and Judge-Advocate, 3d Brig., Nov. 20, 1886.
Harrison White	Major	Quartermaster	Oct. 22, 1888	Major and Q. M., 3d Brig., Oct. 22, 1888.
L. L. Dixon	Major	Commissary	May 31, 1890	<i>Service in other States, and the United States.</i> —Enlisted in Co. F, 11th Ill. Vol. Inf., April 22, 1861; discharged July 8, 1861; enlisted Co. B, 4th Ill. Vol. Cav., Aug. 24, 1861, as Sergt.; Capt., Feb. 15, 1864; discharged Jan. 26, 1866.
Asa Clark	Lieut.-Col.	Surgeon	Mar. 10, 1887	Ord. Sergt., 6th Inf., Nov. 9, 1887; Major and Com'y, May 31, 1890.
J. D. McDougal	Major	Paymaster	Nov. 20, 1886	Appointed Maj. and Surg., 3d Brig., Feb. 26, 1880; rank increased by Act of Legislature to Lieut.-Col., March 10, 1887.
Morgan D. Baker	Major	Inspector Rifle Practice.	May 2, 1878	Appointed Major and Paymaster, 3d Brig., Nov. 20, 1886.
Benjamin Armington	Major	Signal Officer	Mar. 2, 1888	Appointed Maj. and Insp. of Rifle Practice, 3d Brig., May 2, 1878. Service continuous.
H. S. Todman	Captain	Aid-de-Camp	Oct. 18, 1887	Cadet, University of California, 1882; enlisted in Co. B, 6th Inf., 3d Brig., Sept. 6, 1886; Maj. and Sig. Officer, March 2, 1888.
SIXTH REGIMENT OF INFANTRY—FIELD AND STAFF. Organized Feb. 21, 1888.	Captain	Aid-de-Camp		Appointed Capt. and A. D. C. to commander 3d Brig., Oct. 18, 1887.
Eugene Iele	Colonel	Commanding	Feb. 21, 1888	Enlisted in City Guard, Stockton, July 11, 1866; 1st Lieut., July 13,

J. J. Nunan	Lieut.-Col.	Feb. 21, 1888	1866; Capt., Feb. 22, 1867; resigned Aug. 9, 1867; elected 2d Lieut., Stockton Guard, 3d Brig., Dec. 12, 1871; 1st Lieut., Nov. 22, 1873; Maj. and Assist. Adjt.-Gen., 3d Brig., May 13, 1875; resigned to accept Capt. (Stockton Guard) Co. A, 6th Inf., Oct. 16, 1876; Lieut.-Col., 6th Inf., July 19, 1886; Brig.-Gen. commanding 3d Brig., Oct. 2, 1886; resigned to accept election of Maj., 6th Inf., June 3, 1887; Lieut.-Col., 6th Inf., Nov. 23, 1887; Col., Feb. 21, 1888. <i>Service in other States, and the United States.</i> —Member of Co. E, 55th N. Y. Militia; enlisted as Bugler, U. S. A., May 1, 1861; commissioned 2d Lieut., Co. C, 2d Cal. Inf. Vols., Jan. 5, 1863; resigned July 31, 1865.
Stuart S. Wright	Major	Nov. 23, 1887	Enlisted in Stockton Guard (unattached), 3d Brig., Dec. 15, 1873; 2d Lieut., Jan. 10, 1876; 1st Lieut., April 20, 1876; term expired, March 31, 1884; elected Capt. Co. B, 6th Inf., 3d Brig., May 21, 1884; Lieut.-Col., 6th Inf., Feb. 21, 1888.
Robert E. Murray	Captain	Mar. 1, 1889	Enlisted in Co. C, 6th Inf., June 15, 1885; 1st Lieut., June 15, 1885; Major, Nov. 23, 1887. Enlisted in the Emmet Guard (independent), of Stockton, Cal.; 2d Lieut., Jan., 1880; 1st Lieut., Jan., 1881; reflected in 1882; same in 1883 and 1884; Co. mustered into service, and designated Co. B, 6th Inf., 3d Brig., May 22, 1884; commissioned 1st Lieut., May 22, 1884; served in the Moquelumnos War, July 8, 1884; resigned July 25, 1885; enlisted in Co. G, 1st Artillery, 4th Brig., Aug. 3, 1885; discharged June 21, 1887; appointed 1st Lieut. and Com'y, 6th Inf., 3d Brig., June 21, 1887; Capt. and Adjt., March 1, 1889.
Charles W. Callahan P. Y. Baker	1st Lieut. 1st Lieut.	June 24, 1889 Oct. 17, 1889	Appointed 1st Lieut. and Q. M., 6th Inf., Oct. 17, 1889. <i>Service in other States, and the United States.</i> —Served in Co. C, 2d Cal. Inf., from Sept. 27, 1861, to Sept. 1864; reenlisted as a veteran for one year; transferred to Co. G, 2d Cal. Inf.; discharged as Sergt., June, 1865. Enlisted in Co. E, 6th Inf., Dec. 9, 1887; Sergt., Jan. 25, 1888; 1st Lieut. and Com'y, March 6, 1889.
Joseph C. Ward	Commissary	Mar. 6, 1889	Appointed Maj. and Surg. 6th Inf., May 28, 1890.
Francis M. Spongley Oronil McHenry Joseph F. Moseley	Surgeon Paymaster Inspector Rifle Practice	May 28, 1890 Sept. 20, 1889 Mar. 1, 1890	Appointed 1st Lieut. and Paymaster, 6th Regt. Inf., Sept. 20, 1889.
J. Glick John C. Webb	Signal Officer Chaplain	Jan. 25, 1889 Mar. 1, 1890	Capt. and Chaplain, 6th Inf., March 1, 1890. <i>Service in other States, and the United States.</i> —Enlisted in Co. A, 24th Wis. Vol. Inf., Feb. 8, 1864; served in the battles of Rocky Ford, Ga., May 14th and 15th; Resaca, May 17th; Pleasant Hill, or Graves House, May 26th to June 6th; New Hope, Nov. 29th; Spring Hill, Nov. 30th; Franklin, Dec. 14th and 16th; Nashville; mustered out Oct. 19, 1865.

TABLE G—Continued.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
COMPANY A. Organized Sept. 7, 1861. William R. Johnson...	Captain	Commanding	April 14, 1887	Enlisted in Co. A, 6th Inf., Nov. 7, 1878; Corp., March 8, 1880; 1st Sergt., March 31, 1884; 1st Lieut., March 22, 1886; Capt., April 14, 1887.
H. C. William Baker	1st Lieut.		May 13, 1889	Enlisted in Co. A, 6th Inf., May 4, 1880; Corp., Oct. 14, 1881; served in Mouquellamos War, July 8, 1884; Sergt., April 7, 1886; 1st Sergt., June 18, 1887; discharged June 16, 1889; 1st Lieut., May 13, 1889.
Sol. Confer, Jr. COMPANY B. Organized May 21, 1864. Edward Byrnes	2d Lieut.		May 13, 1889	Enlisted in Co. A, 6th Inf., 3d Brig., May 11, 1885; reenlisted May 11, 1888; 2d Lieut., May 13, 1889.
Joseph Goodman	Captain	Commanding	April 16, 1888	Private Co. B, 6th Inf., 3d Brig., May 24, 1884; 1st Lieut., Feb. 15, 1886; Capt., April 16, 1888.
William M. Simpson	1st Lieut.		April 16, 1888	Enlisted in Co. B, 6th Inf., Aug. 4, 1884; Corp., March 30, 1885; 2d Lieut., Feb. 15, 1886; 1st Lieut., April 16, 1888.
COMPANY C. Organized June 15, 1865. Matthew W. Müller	2d Lieut.		April 17, 1890	Enlisted in Co. B, 6th Inf., 3d Brig., July 13, 1885; reenlisted May 25, 1888; Sergt., April 17, 1886; 1st Sergt., May 25, 1888; 2d Lieut., April 17, 1890.
Cornelius B. Pressley	Captain	Commanding	June 15, 1886	Enlisted in Co. F, 1st Inf., 2d Brig., March 3, 1874; discharged July 26, 1875; enlisted in Co. F, 2d Inf., April 28, 1878; discharged April 25, 1881; enlisted in Co. F, 2d Art., 2d Brig., March 20, 1883; discharged Aug. 31, 1883; enlisted in Co. C, 6th Inf., 3d Brig., June 15, 1885; promoted Capt., June 15, 1885.
Ledyard F. Wiechell COMPANY D. Organized Oct. 29, 1867. R. K. Whitmore	1st Lieut.		Mar. 20, 1889	Enlisted in Co. C, 6th Inf., June 15, 1885; discharged March 15, 1886; enlisted in Co. C, 6th Inf., March 21, 1887; Corp., Dec. 12, 1887; 1st Lieut., March 20, 1889.
William H. Wood	2d Lieut.		Mar. 20, 1889	Enlisted in Co. C, 6th Inf., 3d Brig., June 15, 1885; reenlisted June 16, 1888; Corp., Dec. 12, 1887; 2d Lieut., March 20, 1889.
Philo H. Medley	Captain	Commanding	June 13, 1888	Enlisted in Cadet Co., 6th Inf., April 10, 1886; 2d Lieut., April 10, 1886 (Co. mustered into service as Co. D, 6th Inf., Oct. 29, 1887); elected 1st Lieut., Oct. 29, 1887; Capt., June 13, 1888.
	1st Lieut.		Mar. 20, 1889	Enlisted in Co. D, 6th Inf., Oct. 29, 1887; Sergt., Oct. 29, 1887; 2d Lieut., June 13, 1888; 1st Lieut., March 20, 1889.
	2d Lieut.		Mar. 20, 1889	Enlisted in Co. D, 6th Inf., 3d Brig., June 25, 1888; Corp., Oct. 28, 1888; 2d Lieut., March 20, 1889.

COMPANY F. Organ- ized Dec. 9, 1887.	Captain	Commanding	Dec. 9, 1887	Enlisted in Co. E, 6th Inf., Dec. 9, 1887; Capt., Dec. 9, 1887. <i>Service in other States, and the United States.</i> —Mustered in service June 6, 1861, and out Sept., 1865; served in 1st U. S. Inf., 29th and 43d Wis. Vol. Inf.; wounded twice.
M. J. Byrnes George W. Stewart	1st Lieut. 2d Lieut.		Dec. 9, 1887 Dec. 9, 1887	Enlisted in Co. E, 6th Inf., Dec. 9, 1887; 1st Lieut., Dec. 9, 1887. Enlisted in Co. E, 6th Inf., Dec. 9, 1887; 2d Lieut., Dec. 9, 1887.
COMPANY F. Organ- ized Jan. 26, 1888.	Captain	Commanding	Jan. 31, 1889	Enlisted in Co. C, 6th Inf., June 15, 1885; Corp., 1886; Sergt., May, 26, 1887; 2d Lieut., June 20, 1888; Capt. Co. F., 6th Inf., Jan. 31, 1889.
Colin Chisholm	1st Lieut.		Oct. 10, 1889	Enlisted in Co. C, 6th Inf., June 15, 1885; enlisted in Co. F, 6th Inf., Jan. 21, 1889; 2d Lieut., Mar. 21, 1889; 1st Lieut., Oct. 10, 1889.
George F. Minns	2d Lieut.		Oct. 10, 1889	Enlisted in 2d Art. Cadet Co., Oct. 27, 1882; discharged Mar. 1, 1884; enlisted in Co. B, 5th Inf., Dec. 4, 1884; discharged July 1, 1885; enlisted in Co. F, 6th Inf., Jan. 26, 1888; Sergt., Mar. 28, 1888; 1st Sergt., April 12, 1889; 2d Lieut., Oct. 10, 1889.
FOURTH BRIGADE— BRIGADIER-GENERAL AND STAFF.				
Timothy W. Sheehan	Brig.-Gen.	Commanding	Oct. 17, 1887	Elected Capt. Emmet Guard (unattached), 4th Brig., April 27, 1867; reelected April 1, 1869; resigned June 16, 1869; elected Capt. Co. G, 1st Art., Jan. 24, 1879; promoted Col. 1st Art., Oct. 31, 1881; retired Mar. 24, 1887, per S. O. No. 14; appointed Brig.-Gen., Oct. 17, 1887. <i>Service in other States, and the United States.</i> —Enlisted in Co. I, 24th Maine Vols., Oct. 13, 1862; discharged Aug. 25, 1863; attached to Gen. Banks' division.
C. H. Hubbard	Lieut.-Col.	Adjutant-General	Mar. 20, 1889	Appointed Major and Com'y, 4th Brig., Jan. 19, 1880; reappointed May 18, 1882; Maj. and Asst. Adjt.-Gen., Aug. 3, 1885; reappointed Oct. 26, 1887; rank increased by Act of Legislature to Lieut.-Col., Mar. 20, 1889. <i>Service in other States, and the United States.</i> —Enlisted June 24, 1861, in 23d Regt. O. V. I.; reenlisted Nov. 13, 1863, as Q. M. Sergt., 23d Regt. O. V. I.; promoted 2d Lieut., 23d Regt. O. V. I., July 1, 1864; promoted to 1st Lieut. O. V. I., July 25, 1864; discharged July 26, 1865.
Frank D. Ryan	Major	Inspector	Aug. 3, 1885	Elected 2d Lieut., Co. B, 1st Art., Feb. 17, 1882; 1st Lieut., June 19, 1882; appointed Maj. and Insp., 4th Brig., Aug. 3, 1885.
August Heilbron	Major	Ordinance Officer	Jan. 19, 1880	Elected 1st Lieut. Sac. Hussars (unattached), N. G. C., Aug. 2, 1867; Maj. and Insp., 4th Brig., Dec. 1, 1874; term expired March 7, 1877; Maj. and Ord. Officer, Jan. 19, 1880.
Fred. W. Birdsall	Major	Engineer Officer	Oct. 28, 1887	Elected 1st Lieut. Co. A, 1st Art., 4th Brig., Aug. 5, 1887; Maj. and Eng. Officer, 4th Brig., Oct. 28, 1887.

TABLE G—Continued.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
Clinton L. White	Major	Judge-Advocate	Oct. 26, 1887	Elected Capt. Co. G, 1st Art., June 18, 1883; term expired, June 29, 1885; enlisted in same company, July 13, 1885; appointed Maj. and Judge-Advocate, Oct. 26, 1887.
Charles S. Houghton	Major	Quartermaster	Oct. 26, 1887	Enlisted in Co. E, 1st Art., Nov. 11, 1884; appointed Maj. and Q. M., 4th Brig., Oct. 26, 1887.
W. S. Leake	Major	Commissary	Oct. 16, 1883	Appointed Maj. and Insp. of Rifle Prac., 4th Brig., Oct. 16, 1883; transferred to Subsistence Department, Oct. 26, 1887.
M. Gardner	Lieut.-Col.	Surgeon	Mar. 10, 1887	Appointed Maj. and Surg., 4th Brig., Feb. 19, 1883; rank increased by Act of Legislature to Lieut.-Col., March 10, 1887.
Harris Weinstock	Major	Paymaster	Oct. 26, 1887	Enlisted in Co. A, 1st Art., June 13, 1882; Corp., June 5, 1883; 1st Lieut., July 1, 1884; Capt. Co. E, 1st Art., Oct. 21, 1884; term expired Nov. 11, 1886; appointed Major and Paymaster, 4th Brig., Oct. 26, 1887.
John A. Sheehan	Major	Inspector Rifle Practice.	Oct. 26, 1887	Enlisted in Co. G, 1st Art., 4th Brig., Feb. 11, 1879; Corp., 1879; Sergt., May 15, 1880 (promoted); Capt. and A. D. C. to commander 4th Brig., Nov. 16, 1881; Maj. and Insp. of Rifle Prac., Oct. 26, 1887.
Wm. H. Sherburn	Major	Signal Officer	Oct. 26, 1887	Enlisted in Co. H, 4th Inf., in 1864, and discharged in 1867; enlisted in Signal Corps, 1st Art., Aug. 1, 1887; Major and Signal Officer, Oct. 26, 1887.
Daniel J. Long	Captain	Aid-de-Camp	Oct. 26, 1887	Appointed 1st Lieut. and Ord. Officer, 1st Art., May 5, 1880; Capt. and A. D. C. to commander 4th Brig., Oct. 26, 1887.
Michael J. Dillman FIRST REGIMENT OF ARTILLERY — FIELD AND STAFF. Organ- ized March 19, 1880.	Captain	Aid-de-Camp	Oct. 26, 1887	Enlisted in Co. E, 1st Art., 4th Brig., Dec. 13, 1884; Capt. and A. D. C. to commander 4th Brig., Oct. 26, 1887.
John W. Guthrie	Colonel	Commanding	April 7, 1887	Private Co. A (4th Regt.), 1st Art., June 9, 1869; Sergt., Jan. 5, 1870; 2d Lieut., Aug. 20, 1870; 1st Lieut., May 31, 1872; Capt., Aug. 20, 1872; reelected Capt., Sept. 3, 1874, Sept., 1876; 1st Lieut. and Adjt. (4th Inf.), 1st Art., April 27, 1880; Capt. and Adjt., March 4, 1881; Lieut.-Col., Nov. 16, 1881; reelected Dec. 31, 1885; Col., Apr. 7, 1887.
Edwin H. McKee	Lieut.-Col.		April 7, 1887	Enlisted in Co. A, 1st Art., Jan. 23, 1867; served as Sergt. and 1st Sergt.; elected 1st Lieut., Co. A, 4th Inf., July 1, 1875; reelected Oct. 4, 1877; Major, 1st Art., March 31, 1880; reelected April 4, 1884; Lieut.-Col., April 7, 1887.
Presley B. Johnson	Major		Mar. 29, 1890	Enlisted in Co. G, 1st Art., Nov. 10, 1880; honorably discharged, R. O. No. 16, Dec. 1, 1883; enlisted in Co. E, 1st Art., Nov. 11, 1884; 1st Sergt., Feb. 9, 1886; 2d Lieut., Nov. 11, 1886; 1st Lieut., Oct. 12, 1887; Major, 1st Art., March 29, 1890.

W. Walter Greer	Captain	Adjutant	June 7, 1890..	Appointed Com'y Sergt., 1st Regt. Art., 4th Brig., July 21, 1887; Capt. and Adjt., June 7, 1890.
William A. Gelf, Jr.	1st Lieut.	Ordnance Officer	Nov. 22, 1889..	Enlisted in Co. F, 1st Art., May 18, 1885; Corp., July 21, 1885; Sergt., April 25, 1887; 2d Lieut., Oct. 12, 1887; 1st Lieut. and Ord. Officer, 1st Art., Nov. 22, 1889.
William B. Maydwell	1st Lieut.	Quartermaster	June 9, 1888..	Enlisted in Co. G, 1st Art., July 20, 1885; Corp., Nov. 24, 1885; Sergt., July 12, 1887; 1st Lieut. and Com'y, June 9, 1888; transferred to Q. M. Dept., Nov. 29, 1889.
Albert J. Plant	1st Lieut.	Commissary	Jan. 12, 1885..	<i>Service in other States, and the United States.</i> —Enlisted in Co. A, 134th Regt. Ill. Vol. Inf., May 14, 1864; discharged Oct. 25, 1864. Enlisted in Co. G, 1st Art., 4th Brig., June 15, 1881; Corp., Feb. 15, 1882; Sergt., April 29, 1882; Regtl. Q. M. Sergt., 1st Art., June 15, 1884; appointed Capt. Governor's Guard Cadets, same regiment, Aug. 25, 1884; mustered out of the service with company, R. O. No. 4, Jan. 12, 1885; appointed 1st Lieut. and Paymaster, 1st Art., Jan. 12, 1885; transferred to Ord. Dept., Nov. 21, 1887; transferred to Subsistence Dept., Nov. 29, 1889.
Henry S. Welch	Major	Surgeon	April 27, 1880..	Appointed Maj. and Surg., 1st Art., 4th Brig., April 27, 1880.
William R. Ormsby	1st Lieut.	Paymaster	Nov. 21, 1887..	Enlisted in Co. E, 1st Art., Nov. 11, 1884; Corp., March 30, 1885; 1st Lieut. and Paymaster, 1st Art., Nov. 21, 1887.
Marshal Hale, Jr.	1st Lieut.	Inspector Rifle Practice	July 30, 1890..	Appointed 1st Lieut. and Inspector of Rifle Practice, 1st Regt. Art., 4th Brig., July 30, 1890.
Ira A. Robie	1st Lieut.	Signal Officer	Sept. 28, 1889..	Appointed 1st Lieut. and Signal Officer, 1st Regt. Art., 4th Brig., Sept. 28, 1889.
John F. Von Herrlich	Captain	Chaplain	Mar. 31, 1888..	Appointed Capt. and Chaplain, 1st Art., March 31, 1888.
BATTERY A. Organized Sept. 4, 1866.	Captain	Commanding	July 12, 1888..	Enlisted in Governor's Guard Cadets, 1st Art., 4th Brig., March, 1881; discharged June 20, 1883; enlisted in Battery A, 1st Art., 4th Brig., May 9, 1883; Corp., July 1, 1884; Sergt., Feb. 17, 1885; 2d Lieut., June 30, 1885; reëlected July 12, 1887; 1st Lieut., Oct. 11, 1887; Capt., July 12, 1888.
A. J. Lloyd	1st Lieut. ....	.....	July 12, 1888..	Enlisted in Governor's Guard Cadets, 1st Art., Nov. 8, 1882; transferred to Battery A, same Regt., July 10, 1883; Corp., Aug. 8, 1885; Sergt., Nov. 24, 1885; reëlected July 10, 1886; 2d Lieut., Oct. 11, 1887; 1st Lieut., July 12, 1888.
Martin F. Tyler	2d Lieut. ....	.....	July 15, 1890..	Enlisted in Battery A, 1st Art., 4th Brig., March 26, 1889; 2d Lieut., July 15, 1890.
LIGHT BATTERY B. Organized Sept. 27, 1866.	Captain	Commanding	June 10, 1882..	Enlisted in Battery G, 1st Art., Feb. 21, 1877; term expired Feb. 20, 1880; elected 1st Lt. Light Bat. B, 1st Art., Feb. 17, 1882; Capt., June 10, 1882; reëlected June 23, 1884, June 21, 1886, and June 27, 1888.
John Cooke .....	.....	.....	.....	.....

TABLE G—Continued.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
Samuel Kay	Sr. 1st Lieut.		June 27, 1888	Elected 2d Lieut. Light Battery B, 1st Art., June 3, 1885; 1st Lieut., June 27, 1888.
Charles B. Strong	Jr. 1st Lieut.		June 27, 1888	
William H. Jennings	2d Lieut.		Oct. 30, 1889	Enlisted in Light Battery B, 1st Art., 4th Brig., June 10, 1887; Corp., Feb. 15, 1889; 2d Lieut., Oct. 30, 1889.
Gustave Kreuzberger	2d Lieut.		June 25, 1890	Enlisted in Light Battery B, 1st Art., 4th Brig., June 15, 1882; Corp., July 1, 1884; Sergt., June 23, 1886; reenlisted June 15, 1886, June 15, 1888; 2d Lieut., June 25, 1890.
BATTERY C. Organized April 18, 1863.				
George A. Nihell	Captain	Commanding	Nov. 30, 1887	Enlisted in Battery C, 1st Art., 4th Brig., May 6, 1876; reenlisted May 6, 1879; reenlisted May 6, 1882; served as Corp., Sergt., 1st Sergt., and 1st Lieut., Dec. 18, 1883; Capt., Nov. 30, 1887.
Preston F. Simonds	1st Lieut.		Nov. 30, 1887	Enlisted in Battery C, 1st Art., 4th Brig., Nov. 1, 1879; reenlisted Nov. 1, 1882; 2d Lieut., Jan. 14, 1884; reelected Jan. 16, 1886; 1st Lieut., Nov. 30, 1887.
Henry W. Rich	2d Lieut.		Nov. 30, 1887	Enlisted in Battery C, 1st Art., 4th Brig., Oct. 30, 1881; reenlisted Oct. 30, 1884; reenlisted Oct. 30, 1887; 2d Lieut., Nov. 30, 1887.
BATTERY E. Organized Nov. 26, 1883.				
Henry I. Seymour	Captain	Commanding	Oct. 12, 1887	Enlisted in Battery E, 1st Art., Nov. 11, 1884; Sergt., March 30, 1885; 2d Lieut., Dec. 17, 1885; 1st Lieut., Nov. 11, 1886; Capt., Oct. 12, 1887.
Frank G. Smith	1st Lieut.		May 1, 1890	Enlisted in Battery E, 1st Art., Jan. 30, 1885; Corp., April 25, 1887; Sergt., Dec. 30, 1887; reenlisted May 1, 1888; 2d Lieut., Oct. 17, 1889; 1st Lieut., May 1, 1890.
James O. Sprague	2d Lieut.		May 1, 1890	Enlisted in Battery E, 1st Art., Nov. 3, 1887; Corp., Nov. 10, 1888; Sergt., Feb. 1, 1890; 2d Lieut., May 1, 1890.
BATTERY F. Organized March 5, 1881.				
W. H. Curson	Captain	Commanding	April 24, 1886	Enlisted in Battery F, 1st Art., 4th Brig., May 7, 1881; Sergt., March 14, 1882; 2d Lieut., Dec. 8, 1883; reelected Jan. 30, 1886; Capt., April 24, 1886; reelected, April 28, 1888.
Robert E. Hopkins	1st Lieut.		April 26, 1890	Enlisted in Battery F, 1st Art., June 28, 1887; Sergt., Sept. 30, 1887; 2d Lieut., April 28, 1888; 1st Lieut., April 26, 1890.
Jarriet B. Hevel	2d Lieut.		April 26, 1890	Enlisted in Battery F, 1st Art., 4th Brig., March 19, 1881; reenlisted April 7, 1884; Sergt. —; 1st Sergt., May 22, 1886; reenlisted March 5, 1887, March 5, 1890; 2d Lieut., April 26, 1890.
BATTERY G. Organized July 29, 1870.				
Thomas B. Hall	Captain	Commanding	June 29, 1885	Enlisted in Battery E, 1st Art., Nov. 11, 1884; Capt. Battery G, 1st Art., June 29, 1885; reelected July 11, 1887.

Maurice H. Sheehan	1st Lieut.	July 1, 1889	Enlisted in Battery G, 1st Art., 4th Brig., Feb. 10, 1879; 2d Lieut., Nov. 21, 1881; 1st Lieut., Jan. 14, 1884; term expired Jan. 16, 1888; enlisted Sept. 24, 1888; 1st Lieut., July 1, 1889.
Albert E. Stearns	2d Lieut.	Aug. 12, 1889	Enlisted in Battery G, 1st Art., 4th Brig., March 26, 1889; Corp., April 18, 1889; 2d Lieut., Aug. 12, 1889.
FIFTH BRIGADE, BRIG-ADJUTANT-GENERAL AND STAFF.			
J. W. B. Montgomery	Brig.-Gen.	Feb. 5, 1887	Appointed Maj. and Q. M., 5th Brig., Nov. 24, 1877; Brig.-Gen. commanding 5th Brig., Feb. 6, 1887.
H. T. Batchelder	Lieut.-Col.	Mar. 6, 1890	Elected 2d Lieut. Chico (unattached), 5th Brig., April 30, 1875; Capt., Dec. 1, 1877; reflected Capt., Dec. 1, 1879; reflected Capt., Dec. 1, 1881; reflected Capt., Dec. 1, 1883; reflected Capt., Dec. 1, 1885; Maj. and Insp., 5th Brig., March 7, 1887; Lieut.-Col. and Assist. Adjt.-Gen., March 6, 1890.
George Sutter Snook	Major	Mar. 6, 1890	<i>Service in other States, and the United States.</i> —Enlisted in Co. A, 22d Maine Vol. Inf., Aug. 1862; promoted Com'y Sergt., October, 1862; promoted 2d Lieut., December, 1862. Enlisted in Chico Guard (unattached), 5th Brig., Nov. 10, 1880; Sergt., April 23, 1886; reenlisted Dec. 10, 1888; reenlisted Dec. 10, 1886; Capt. and A. D. C. to commander 5th Brig., March 7, 1887; Maj. and Brig. Insp., March 6, 1890.
E. H. Ward	Major	Mar. 7, 1887	<i>Service in other States, and the United States.</i> —Enlisted in Co. C, 12th Ind. Inf., Oct. 1, 1861; mustered into U. S. service as 2d Lieut., 10th Ind. Vol. Cav., Jan. 10, 1864; promoted 1st Lieut., March 1, 1865; promoted Capt., June 24, 1865; mustered out Aug. 31, 1865.
Allen Henry	Major	Oct. 23, 1886	Appointed Maj. and Ord. Officer, 5th Brig., March 7, 1887.
Henry V. Reardon	Major	Mar. 1, 1887	Appointed Maj. and Eng. Officer, 5th Brig., Oct. 23, 1886; reappointed March 1, 1887.
A. L. Nichols	Major	Mar. 1, 1887	Appointed Maj. and Q. M., 5th Brig., March 1, 1887.
Frederick H. Greeley	Major	April 19, 1890	Enlisted in Co. C, 8th Inf., 5th Brig., Dec. 19, 1889; Maj. and Com'y, 5th Brig., April 19, 1890.
Edward Sweeney	Major	April 19, 1890	Appointed Maj. and Surg., 5th Brig., March 1, 1887; rank increased by an Act of Legislature to Lieut.-Col., March 10, 1887.
R. A. Gray	Lieut.-Col.	Mar. 10, 1887	<i>Service in other States, and the United States.</i> —Passed 1st Assist. Surg., U. S. N., from 1871 to 1872, stationed at U. S. Naval and Civil Marine Hospital, Portland, Maine.
T. H. Barnard	Major	Mar. 7, 1887	Appointed Maj. and Insp. of Rifle Practice, 5th Brig., March 7, 1887.
William H. Buser	Major	July 14, 1890	Appointed Captain and A. D. C. to commander 5th Brig., Feb. 13, 1890; reappointed March 7, 1887.
H. A. Rawson	Captain	Feb. 13, 1890	
Henry B. Shackelford	Captain	April 19, 1890	

TABLE G—Continued.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
EIGHTH BATTALION INFANTRY. Organized February 15, 1890. Park Henshaw	Lieut.-Col.	Commanding	Feb. 15, 1890	Appointed Major and Assist. Adj.-Gen. 5th Brig., March 1, 1887; rank increased by Act of Legislature March 20, 1889; elected Lieut.-Col. 8th Battalion Inf., Feb. 15, 1890.
Burr H. Mitchell	Major.		Feb. 15, 1890	Appointed Capt. Cadets Brewer's Military Academy, two years' service; enlisted in Colusa Guard (unattached), 5th Brig., June 8, 1887; mustered into the service of the State, Oct. 10, 1887; promoted Capt., Oct. 10, 1887; Major, 8th Battalion Inf., Feb. 15, 1890.
Ulric B. Collins	Captain.	Adjutant	May 28, 1890	Enlisted in Co. A, 8th Inf., 5th Brig., Feb. 5, 1884; Corp., April 3, 1886; 1st Sergt., Aug. 4, 1887; 2d Lieut., March 26, 1888; Capt. and Adj., 8th Inf., May 28, 1890.
Frederick Grotefend William H. Winter	1st Lieut. 1st Lieut.	Ordnance Officer. Quartermaster	May 28, 1890 May 28, 1890	Enlisted in Co. E, 8th Inf., 5th Brig., Dec. 19, 1889; 1st Lieut. and Q. M., May 28, 1890.
William H. Parks	1st Lieut.	Commissary	May 28, 1890	Enlisted in Co. C, 8th Inf., 5th Brig., Dec. 19, 1889; appointed 1st Lieut. and Commissary 8th Inf., May 28, 1890.
Douglas Cone	1st Lieut.	Paymaster	May 28, 1890	Appointed 1st Lieut. and Paymaster, 8th Inf., 5th Brig., May 28, 1890.
Richard White	Major. 1st Lieut.	Surgeon. Signal Officer	May 28, 1890	Enlisted in Co. A, 8th Inf., Nov. 3, 1886; Corp., June 17, 1889; 1st Lieut. and Signal Officer, 8th Bat. of Inf., May 28, 1890.
Sterling P. Dunn	1st Lieut.	Insp. of Rifle Practice	May 28, 1890	Enlisted in Co. A, 8th Inf., 5th Brig., May 23, 1881; reenlisted May 23, 1883; May 12, 1886; Corp., Jan. 8, 1886; term expired, Aug. 1, 1888; appointed 1st Lieut. and Inspector of Rifle Practice, 8th Inf., May 28, 1890.
COMPANY A. Organized April 5, 1875. Cassius B. Swain	Captain	Chaplain	Mar. 26, 1889	Enlisted in Chico Guard (unattached), 5th Brig., Oct. 3, 1879; reenlisted Oct. 3, 1882; Corp., Jan. 26, 1880; Sergt., Sept. 5, 1884; 1st Lieut., May 23, 1887; Capt., March 26, 1889.
Joseph H. Gunby COMPANY B. Organized Oct. 10, 1887. James R. Shelton	1st Lieut. Captain	Commanding	Mar. 26, 1889 Aug. 12, 1890	Enlisted in Chico Guard (unattached), 5th Brig., Jan. 9, 1884; 2d Lieut., June 26, 1886; 1st Lieut., March 26, 1889. Mustered into the Colusa Guard, Co. B, 8th Inf., Oct. 10, 1887; 2d Lieut., Oct. 16, 1889; 1st Lieut., April 16, 1890; Capt., Aug. 12, 1890.

Ross McAmis	1st Lieut.	Aug. 12, 1890	Enlisted in Co. B, 8th Inf., 5th Brig., Oct. 10, 1887; 2d Lieut., April 16, 1890; 1st Lieut., Aug. 12, 1890.
Wesley K. DeJarnatt	2d Lieut.	Aug. 12, 1890	Enlisted in Co. B, 8th Inf., Oct. 10, 1887; Sergt., Nov. 24, 1887; 1st Sergt., Nov. 30, 1888; 2d Lieut., Aug. 12, 1890.
COMPANY C. Organized Dec. 19, 1889.			
George B. Baldwin	Captain	Dec. 19, 1889	Enlisted in Co. C, 8th Inf., 5th Brig., Dec. 19, 1889; Capt., Dec. 19, 1889.
John T. Lydon	1st Lieut.	Dec. 19, 1889	Enlisted in Co. C, 8th Inf., 5th Brig., Dec. 19, 1889; 1st Lieut., Dec. 19, 1889.
William P. Ellis, Jr.	2d Lieut.	Dec. 19, 1889	Enlisted in Co. C, 8th Inf., 5th Brig., Dec. 19, 1889; 2d Lieut., Dec. 19, 1889.
COMPANY D. Organized Dec. 19, 1889.			
Bruce B. Lee	Captain	Dec. 19, 1889	Enlisted in Co. D, 8th Inf., Dec. 19, 1889; Capt., Dec. 19, 1889.
James R. Sweeney	1st Lieut.	Dec. 19, 1889	Enlisted in Co. D, 8th Inf., Dec. 19, 1889; 1st Lieut., Dec. 19, 1889.
Edward J. Blossom	2d Lieut.	June 19, 1890	Enlisted in Co. D, 8th Inf., Dec. 19, 1889; 1st Sergt., Dec. 19, 1889; 2d Lieut., June 19, 1890.
COMPANY E. Organized Dec. 19, 1889.			
John E. Reynolds.	Captain	Dec. 19, 1889	Enlisted in Co. E, 8th Inf., 5th Brig., Dec. 19, 1889; Capt., Dec. 19, 1889.
Thomas B. Dozier	1st Lieut.	Dec. 19, 1889	Enlisted in Co. E, 8th Inf., 5th Brig., Dec. 19, 1889; 1st Lieut., Dec. 19, 1889.
Littleton T. Crume	2d Lieut.	Dec. 19, 1889	Enlisted in Co. E, 8th Inf., 5th Brig., Dec. 19, 1889; 2d Lieut., Dec. 19, 1889.
SIXTH BRIGADE. BRIG-ADIER-GENERAL AND STAFF.			
J. W. Freese	Brig.-General	Feb. 8, 1887	Enlisted in Eureka Guard, March 15, 1879; Capt., Dec. 28, 1881; resigned Nov. 14, 1882; appointed Brig.-Gen., Feb. 8, 1887. <i>Service in other States, and the United States.</i> —Enlisted in 7th Maine Vol. Inf., April, 1861; Capt., Aug., 1861; Capt. 1st D. C. Cav., in 1863; transferred to 1st Me. Cav. in 1864; Maj. 1st Me. Cav., 1865; served in Army of Potomac.
James B. Brown	Lieut.-Col.	Mar. 20, 1889	Elected 1st Lieut. Eureka Guard, March, 1879; Capt., Dec. 16, 1879; term expired Dec. 28, 1881; appointed Maj. and Assist. Adjt.-Gen., March 15, 1887; rank increased by Act of Legislature to Lieut.-Col., March 20, 1889. <i>Service in other States, and the United States.</i> —Enlisted in Co. H, 2d Inf., Cal. Vols., Nov. 26, 1861; promoted Corp., Jan. 18, 1862; Sergt., Nov. 22, 1862; 1st Sergt., October 6, 1864; mustered out Nov. 23, 1864.
	Assist. Adjt.-Gen.		

TABLE G—Continued.

NAME.	Rank.	Office.	Date of Rank.	Original Entry into Service, and Subsequent Service and Commission in this State.
James T. Kelleher.....	Major.....	Inspector.....	Mar. 15, 1887..	Enlisted in Eureka Guard (unattached), 6th Brig., March 15, 1879; 1st Sergt., May 14, 1879; 2d Lieut., Dec. 15, 1879; Capt., Feb. 28, 1883; term expired, Feb. 28, 1885; appointed Maj. and Insp., 6th Brig., March 15, 1887.
Joseph A. Shaw.....	Major.....	Engineer.....	Mar. 15, 1887..	Member University Cadets from 1877 to 1881; commissioned 1st Lieut., May 11, 1881; appointed Maj. and Eng. Officer, 6th Brig., March 15, 1887.
James P. Hopkins.....	Major.....	Ordinance Officer.....	Mar. 15, 1887..	Enlisted in Eureka Guard (unattached), 6th Brig., March 15, 1879; Sergt., May 14, 1879; reenlisted March 15, 1882; Maj. and Ord. Officer, 6th Brig., March 15, 1887.
Chas. Morgan Wheeler.	Major.....	Judge-Advocate.....	July 7, 1888..	Appointed Maj. and Judge-Advocate, 6th Brig., July 7, 1888.
John Harpst.....	Major.....	Quartermaster.....	Mar. 15, 1887..	Appointed Maj. and Q. M., 6th Brig., March 15, 1887.
John C. Bull, Jr.....	Major.....	Commissary.....	Mar. 15, 1887..	Appointed Maj. and Com'y, 6th Brig., March 15, 1887.
Reuben Gross.....	Lieut.-Col.....	Surgeon.....	April 29, 1889..	Appointed Lieut.-Col. and Surgeon, 6th Brig., April 29, 1889.
Fred. W. Bell.....	Major.....	Paymaster.....	Mar. 15, 1887..	Appointed Major and Paymaster, 6th Brig., March 15, 1879; enlisted in Eureka Guard (unattached), 6th Brig., March 15, 1885; appointed reenlisted March 15, 1882; reenlisted March 15, 1885; appointed Major and Inspector of Rifle Practice, 6th Brig., March 15, 1887.
Charles G. Taylor.....	Major.....	Inspector of Rifle Practice.	Mar. 15, 1887..	Major and Inspector of Rifle Practice, 6th Brig., March 15, 1887.
Samuel W. Freese.....	Major.....	Signal Officer.....	June 27, 1890..	Capt. and A. D. C., 6th Brig., March 15, 1887; Maj. and Sig. Officer, June 27, 1890.
Willard Wells.....	Captain.....	Aid-de-Camp.....	May 29, 1888..	Appointed Capt. and A. D. C. to commander 6th Brig., May 29, 1888.
TENTH BATTALION OF INFANTRY, Organized May 13, 1890.	Captain.....	Aid-de-Camp.....		
J. D. H. Chamberlain.....	Major.....	Commanding.....	Jan. 24, 1888..	Enlisted in Co. A, 10th Inf., 6th Brig., July 29, 1880; reenlisted Sept. 14, 1883, and Sept. 14, 1886; Corp., —; Sergt., Oct. 5, 1887; Maj. and Sig. Officer, 6th Brig., Jan. 24, 1888; Major commanding 10th Inf., 6th Brig., June 14, 1890.
Walter G. Bonner.....	Captain.....	Adjutant.....	June 23, 1890..	Enlisted in Co. B, 10th Inf., 6th Brig., Dec. 21, 1889; 1st Lieut. and Ord. Officer, June 23, 1890.
Vaclav Zamba.....	1st Lieut.....	Ordinance Officer.....	June 26, 1890..	Enlisted in Co. A, 10th Inf., 6th Brig., March 15, 1879; reenlisted April 20, 1882, Mar. 15, 1885, Mar. 21, 1888; Corp., May 17, 1883; Sergt., Mar. 26, 1885; 1st Lieut. and Q. M., 10th Inf., June 23, 1890.
Edwin Ruscoe.....	1st Lieut.....	Quartermaster.....	June 23, 1890..	Enlisted in Co. A, 10th Inf., 6th Brig., April 1, 1880; Corp., Mar. 16, 1881; discharged May 17, 1883; reenlisted Aug. 5, 1889; 1st Lieut. and Com'y, 10th Inf., 6th Brig., June 23, 1890.
William H. Wyman.....	1st Lieut.....	Commissary.....	June 23, 1890..	
Jules B. Pouleur.....	1st Lieut.....	Paymaster.....	June 23, 1890..	

George D. Marvin	Major	Surgeon	June 23, 1890	Enlisted in Co. A, 10th Inf., 6th Brig., March 15, 1879; reenlisted March 15, 1882, and March 16, 1885; Sergt., March 14, 1884; reduced to ranks July 9, 1885; discharged Jan. 26, 1887; 1st Lieut. and Insp. of Rifle Practice, 10th Inf., 6th Brig., June 23, 1890.
John A. Livingston	1st Lieut.	Insp. of Rifle Practice	June 23, 1890	
James S. Todd	1st Lieut. Captain	Signal Officer Chaplain	June 23, 1890	
Company A. Organized Feb. 10, 1879.				
John L. Crichton	Captain	Commanding	May 4, 1887	Enlisted in the Eureka Guard (unattached), 6th Brig., March 15, 1879; promoted Corp., April 27, 1879; promoted Sergt., July 3, 1879; promoted 1st Sergt., May 15, 1880; reenlisted March 15, 1882; promoted 2d Lieut., Feb. 28, 1883; term expired; reenlisted Aug. 1, 1885; promoted Capt., May 4, 1887.
Daniel J. Foley	1st Lieut.		Feb. 8, 1888	Enlisted in Eureka Guard, Dec. 15, 1881; reenlisted Dec. 15, 1884; Corp., March 26, 1885; Sergt., June 9, 1886; 2d Lieut., May 4, 1887; 1st Lieut., Feb. 8, 1888.
John McCarthy	2d Lieut.		Feb. 19, 1890	Enlisted in Co. A, 10th Inf., June 22, 1883; reenlisted June 22, 1886 and 1889; Corp., Oct. 5, 1887; Sergt., Nov. 21, 1888; 2d Lieut., Feb. 19, 1890.
Company B. Organized Dec. 21, 1889.				
Eugene J. Mullin	Captain	Commanding	Dec. 21, 1889	Enlisted in Co. B, 10th Inf., 6th Brig., Dec. 21, 1889; Capt., Dec. 21, 1889.
Harry W. Jackson	1st Lieut.		Dec. 21, 1889	Enlisted in Co. B, 10th Inf., 6th Brig., Dec. 21, 1889; 1st Lieut., Dec. 21, 1889.
Luther D. Greater	2d Lieut.		Dec. 21, 1889	Enlisted in Co. B, 10th Inf., 6th Brig., Dec. 21, 1889; 2d Lieut., Dec. 21, 1889.

TABLE H.
RETIRED LIST OF COMMISSIONED OFFICERS, N. G. C.

NAME.	Rank.	Date of Order.	No. of Order.	Original Entry into Service, and Subsequent Service and Commission in the State.
John McComb-----	Brig.-Gen., 2d Brig----	Dec. 14, 1881--	S. O., No. 91--	Private Co. E, 1st Inf., Sept. 5, 1861; Capt., Sept. 21, 1863; Lieut.-Col., 2d Inf., Oct. 22, 1867; Col., Nov. 4, 1874; Brig.-Gen., 2d Brig. Nov. 23, 1875; reappointed May 21, 1878, and Feb. 13, 1880; retired with rank from Nov. 23, 1875.
James A. Shepherd----	Brig.-Gen., 3d Brig----	Oct. 2, 1886--	S. O., No. 52--	Appointed Major and Judge-Advocate, 3d Brig., June 27, 1876; Major and Ord. Officer, 3d Brig., Feb. 26, 1880; Brig.-Gen. commanding 3d Brig., Feb. 6, 1883; retired with rank from Feb. 6, 1883.
Charles Cadwalader----	Brig.-Gen.-----	Feb. 9, 1887--	S. O., No. 7--	Brig.-Gen. commanding 5th Brig., April 1, 1873; reappointed April 6, 1877, Sept. 2, 1881, Jan. 30, 1883; retired with rank from April 1, 1873.
Joseph G. Wall-----	Brig.-Gen., 6th Brig----	Feb. 9, 1887--	S. O., No. 8--	Brig.-Gen. commanding 6th Brig., Feb. 18, 1876; reappointed Sept. 2, 1881, Jan. 30, 1883; retired with rank from Feb. 18, 1876.
Oscar Woodhams-----	Col., 1st Inf., 2d Brig----	May 15, 1880--	S. O., No. 41--	Enlisted in Co. E, 1st Inf., Sept. 7, 1863; Corp., Oct. 2, 1865; Sergt., April 4, 1867; 2d Lieut., April 13, 1868; Capt., May 17, 1869; Major, 1st Inf., Aug. 30, 1871; Lieut.-Col., Dec. 6, 1875; Col., Dec. 6, 1877; retired with rank from Dec. 6, 1877.
John A. Turner-----	Col. and Assist. Adjt.-Gen. of California.	May 13, 1882--	G. O., No. 10--	Appointed Capt. and A. D. C. to commander 5th Brig., July 20, 1872; Maj. and Paymaster, June 30, 1873; Maj. and Asst. Adjt.-Gen. of California, Feb. 3, 1880; rank increased by Act of Legislature, Mar. 4, 1881, to Col.; retired with rank from Mar. 4, 1881.
Creed Haymond-----	Col., 1st Art.-----	Oct. 3, 1881--	S. O., No. 72--	<i>Service in other States, and the United States.</i> —Enlisted in Co. C, 50th Mass. Inf., Aug. 20, 1862; discharged Aug. 24, 1863, by reason of expiration of term of service.
William Harney-----	Col. and Paymaster-General.	Jan. 19, 1882--	S. O., No. 4--	Major and Inspector, 4th Brig., Jan. 2, 1879; Lieut.-Col. commanding 4th Inf., Jan. 22, 1879; Col. commanding 1st Art., Mar. 31, 1880; retired with rank from Mar. 31, 1880.
C. Mason Kinne-----	Col. and Paymaster-General.	Jan. 10, 1883--	S. O., No. 4--	Enlisted in S. F. Hussars Aug. 14, 1857; served as 2d and 1st Lieuts. three years; Maj. and Judge-Advocate, 2d Brig., May 12, 1862; Lieut.-Col. and A. D. C. to Commander-in-Chief, June 22, 1864; Lieut.-Col. and A. D. C. to Commander-in-Chief, June 10, 1869; Lieut.-Col. and A. D. C. to Commander-in-Chief, Jan. 19, 1872; Col. and Paymaster-Gen., Jan. 18, 1875; Col. and Paymaster-Gen., May 4, 1876; Col. and Paymaster-Gen., Jan. 26, 1880; retired with rank from Jan. 18, 1875.

Private in Light Bat. A (1st Cal. Guard), 1859; Corp., May 4, 1860; Sergt., June 1, 1861; 1st Sergt., Dec. 28, 1861; 2d Lieut., Sept. 2, 1862; resigned to enter "Cal. 100," Dec. 9, 1862; Lieut.-Col. and

George W. Grannis	Col. and Chief Eng.	Jan. 26, 1883	S. O., No. 10	<p>Assist. Adjt.-Gen. Div., Sept. 1, 1874; term expired Jan. 19, 1876; Maj. and Judge-Advocate, 2d Brig., Jan. 19, 1876; Col. and Paymaster-Gen., Jan. 19, 1882; retired with rank from Jan. 19, 1882.</p> <p><i>Service in other States, and the United States.</i>—Private Co. A (Cal. 100), 2d Mass. Cav., Dec. 9, 1862; served as Corp. Sergt., 1st Sergt., and Sergt.-Maj., 2d Lieut., 2d Mass. Cav., Nov. 27, 1863; 1st Lieut. and Adjt., Jan. 1, 1864; Capt. and Adjt., U. S. Vols., Feb. 1, 1865; Assist. Adjt.-Gen., Reg. Brig., 1st Div. Cav. Corps, Army of the Shenandoah and Army of the Potomac; present at the surrender of Gen. Lee; discharged July 10, 1865.</p> <p>Enlisted in the "Independent City Guard" (San Francisco) in 1856; discharged in 1858; elected 2d Lieut. of the "Sotoyome Guard" (Sonoma) in 1858; enlisted in Co. B (City Guard), 1st Inf., in 1860; Corp., Oct. 29, 1861; Sergt., Aug. 14, 1862; 1st Sergt., July 31, 1863; Jr. 2d Lieut., July 6, 1865; Sr. 2d Lieut., Sept. 18, 1865; 1st Lieut., Sept., 1865; Capt., Oct. 16, 1866; Maj., 1st Inf., Nov. 19, 1868; Lieut.-Col., Nov. 1, 1869; Col., Feb. 27, 1875; resigned Nov. 13, 1877; appointed Col. and Chief Eng., Jan. 26, 1880; and placed on "retired list," with rank from Jan. 26, 1880.</p> <p><i>Service in other States, and the United States.</i>—Member of the New Haven Grays, in 1848.</p>
William R. Smedberg	Col., 2d Art., 2d Brig.	Nov. 19, 1885	S. O., No. 58	<p>Appointed Lieut.-Col. and Insp. Div., Sept. 1, 1874; Major and Brig. Insp., 2d Brig. Nov., 1875; Col. (2d Inf.), 2d Art., Oct. 13, 1878; retired with rank from Oct. 15, 1876.</p> <p><i>Service in other States, and the United States.</i>—Private, 7th Regt., N. G. S. N. Y., 1859-1860; private National Rifles, D. C. Militia, April 15, 1861; discharged July 4, 1861; 1st Lieut., 14th U. S. Inf., May 14, 1861; Capt., Oct. 25, 1861; Brev. Major, July 2, 1863; Brev. Lieut.-Col., May 5, 1864; lost right leg at battle of the Wilderness, May 5, 1864; retired from active service as Capt. (mounted), Dec. 15, 1870.</p>
Horace Dodge Ranlett	Col., 5th Inf., 2d Brig.	Jan. 10, 1887	S. O., No. 70 (1886.)	<p>Private Co. B, 1st Inf., Aug. 21, 1866; Corp., Oct. 30, 1867; Sergt., Sept. 9, 1868; 2d Lieut., Nov. 30, 1869; 1st Lieut., March 23, 1871; Capt., Oakland Guard, May 1, 1873; Major, 5th Inf., Dec. 27, 1879; Lieut.-Col., May 22, 1882; Col., Aug. 4, 1885; retired with rank from Aug. 4, 1885.</p>
Gerrard G. Tyrrell	Col. and Surg.-Gen.	Sept. 28, 1887	S. O., No. 68	<p><i>Service in other States, and the United States.</i>—Salinaes Bat., Boston, Mass., in 1860; served in Yokohama Vols. (Japan), in 1862-1863 (a company raised for defense of foreign settlers).</p> <p>1st Lieut. and Assist. Surg., 1st Inf., 4th Brig., July 11, 1874; Major and Surg., 4th Brig., Nov. 30, 1875; reappointed Jan. 19, 1880; Col. and Surg.-Gen., Jan. 30, 1883; retired, Dec. 31, 1886; reappointed Col. and Surg.-Gen., Feb. 8, 1887; retired with rank from Jan. 30, 1883.</p>

TABLE H—Continued.

NAME.	Rank.	Date of Order.	No. of Order.	Original Entry into Service, and Subsequent Service and Commission in this State.
David Wilder	Colonel	April 11, 1889.	S. O., No. 14.	Private Co. B, 1st Inf., Aug. 15, 1862; Corp., Sept. 25, 1865; Sergt., Aug. 21, 1868; 2d Lieut., Oct. 16, 1866; relected, Oct. 20, 1868; 1st Lieut., Nov. 30, 1869; Capt., March 14, 1871; Major, 1st Inf., Feb. 27, 1875; Lieut.-Col., Dec. 1, 1877; retired, July 14, 1880; Lieut.-Col., 2d Art., Aug. 4, 1881; Col., Oct. 20, 1887; retired with rank from Oct. 20, 1887.
H. H. Thrall	Lieut.-Col, 2d Inf.	April 1, 1880.	S. O., No. 24.	Private (City Guard) Co. B, 1st Inf., Sept. 15, 1854; Assist. Surg., 1st Inf., Aug. 8, 1862; 1st Lieut., "Franklin Light Inf.," March 18, 1863; Adjt., 2d Inf., April 3, 1864, and June 12, 1874; Major, Nov. 12, 1874; Lieut.-Col., Feb. 15, 1876; retired with rank from Feb. 15, 1876.
Charles Quinn	Lieut.-Col., 3d Inf.	June 24, 1881.	S. O., No. 34.	<i>Service in other States, and the United States.</i> —Private "Utica Citizens Corps," N. Y. Militia, 1845. Private Montgomery Guard, Dec. 29, 1859; Corp., 1860; 2d Lieut., 1861; 1st Lieut., 2d Inf., March 4, 1862; Capt., Nov. 4, 1864; mustered out of service, 1866; Capt. Montgomery Guard, Feb. 22, 1868; Lieut.-Col., 3d Inf., March 15, 1879; retired with rank from March 15, 1879.
A. W. Von Schmidt	Lieut.-Col. and Eng., Div.	Feb. 27, 1882.	S. O., No. 11.	Lieut.-Col. and Eng. Div., N. G. C., June 14, 1862; reappointed Sept. 1, 1874; reappointed Oct. 21, 1876; term expired March 29, 1878; appointed Lieut.-Col. and Eng. Div., N. G. C., Jan. 22, 1880; retired with rank from Jan. 22, 1880.
Joseph M. Litchfield	Lieut.-Col. and Assist. Adjt.-Gen., Div.	Jan. 25, 1883.	S. O., No. 9.	Capt. and A. D. C., 2d Brig., Jan. 5, 1875; Maj. and Q. M., April 4, 1877; Lieut.-Col. and Assist. Adjt.-Gen. Div., April 22, 1880; retired with rank from April 22, 1880.
Samuel D. Mayer	Lieut.-Col. and Paymaster Div.	Jan. 25, 1883.	S. O., No. 9.	Major and Paymaster, 2d Brig., Jan. 25, 1875; Lieut.-Col. and Assist. Adjt.-Gen. Div., June 25, 1876; term expired, March 29, 1878; Lieut.-Col. and Paymaster Div., Jan. 22, 1880; retired with rank from Jan. 22, 1880.
H. J. Burns	Lieut.-Col. and Insp. Rifle Prac., Div.	June 17, 1883.	S. O., No. 9.	Private Co. C, 1st Inf., July, 1865; Corp., Jan., 1866; 1st Sergt., July, 1866; 2d Lieut., Jan. 4, 1869; relected, 1871; Capt. Co. E, 2d Inf., Oct. 23, 1871; Lieut.-Col. and Insp. of Rifle Prac., Jan. 22, 1880; retired with rank from Jan. 22, 1880.
Cornelius McLean	Lieut.-Col. and A. D. C. to Commander-in-Chief.	July 20, 1886.	S. O., No. 4.	<i>Service in other States, and the United States.</i> —Private Home Guard, Nov. 23, 1861; 1st Sergt., Jan., 1863; 2d Lieut., Nov. 3, 1864. Lieut.-Col. and A. D. C. to Commander-in-Chief, Jan. 30, 1883; retired with rank from Jan. 30, 1883.

Harry W. Carroll	Lieut.-Col. and A. D. C. to Commander-in-Chief.	Feb. 7, 1888.	S. O., No. 7.	Capt. of Cadets, Univ. of Cal., June, 1880; appointed Maj. and Eng., 4th Brig., Feb. 7, 1880; transferred to Inspector's Dept., July 13, 1881; Lieut.-Col. and A. D. C. to Commander-in-Chief, Jan. 30, 1883; reappointed Feb. 8, 1888; retired with rank from Jan. 30, 1883.
Frank P. McLennan	Major.	April 11, 1889.	S. O., No. 14.	1st Lieut. and Q. M., 1st Cav., 2d Brig., March 8, 1866; resigned Oct. 1, 1867; Maj. and Eng. Officer, 2d Brig., Aug. 14, 1872; transferred to Q. M. Dept., April 30, 1888; retired with rank from Aug. 14, 1872.
Patrick R. O'Brien	Maj., 1st Cav.	Dec. 31, 1879.	S. O., No. 41.	Elected Junior 2d Lieut. Co. B, 2d Regt. Inf., Dec. 3, 1863; Capt. Co. C, 1st Cav., March 7, 1865; Maj., July 24, 1868; reelected Aug. 24, 1872; retired with rank from July 24, 1868.
John J. Conlin	Maj., 3d Inf.	June 24, 1881.	S. O., No. 35.	Elected Major 3d Inf., March 11, 1871; retired with rank from March 11, 1871.
Richard H. Savage	Maj. and Paymaster, 2d Brig.	Feb. 26, 1880.	S. O., No. 9.	Private Butler Guard (Santa Cruz), 1862-1863; private Co. B, 1st Inf., 1863-1864; 1st Lieut. and Adj't., 2d Inf., Nov. 23, 1874; Major and Brig. Inspector, Jan. 5, 1875; Col., 2d Inf., Jan. 6, 1876; resigned Sept. 1, 1876; Maj. and Paymaster, 2d Brig., April 4, 1877; retired with rank from April 4, 1877.
Edwin J. Fraser	Maj. and Surg., 2d Art.	Sept. 4, 1882.	S. O., No. 45.	<i>Service in other States, and the United States</i> —Cadet U. S. Mil. Academy, West Point, 1864-1868; Lieut. of Engineers, U. S. A., 1868 to 1871; honorably discharged Jan. 2, 1871; served on staff of Maj.-Gen. George H. Thomas and Maj.-Gen. J. M. Schofield as Aid and Engineer Officer; Major and Chief of Staff to Gen. C. P. Stone, Egyptian Army, 1872 and 1873.
Frederick W. Pearce	Maj., 2d Inf.	Nov. 20, 1879.	S. O., No. 36.	First Lieut. and Assist. Surg. (2d Inf.), 2d Art., July 30, 1874; Major and Surgeon, April 28, 1880; retired with rank from April 28, 1880.
George A. Fisher	Maj. and Q. M., 2d Brig.	Dec. 21, 1882.	S. O., No. 71.	Elected 1st Lieut. Co. C, 2d Inf., March 5, 1869; Capt. Co. D, 1st Inf., Nov. 19, 1869; 1st Lieut. and Adj't., 2d Inf., Feb. 9, 1875; (Capt. Co. B, Aug. 30, 1875; Maj.), 2d Inf., June 27, 1878; retired with rank from June 27, 1878.
W. I. Wallace	Maj. and Insp. of Rifle Prag., 4th Brig.	Jan. 25, 1883.	S. O., No. 9.	Appointed Major and Quartermaster, 2d Brig., Feb. 17, 1880; retired with rank from Feb. 17, 1880.
Adolph F. Klose	Maj. and Insp. of Rifle Prag., 2d Brig.	Jan. 25, 1886.	S. O., No. 3.	<i>Service in other States, and the United States</i> .—First Lieut. Co. A, 23d Inf., Mass. Vols., March 15, 1862; disch'd Oct. 6, 1863, to enter Sig. Corps U. S. A.; appointed 1st Lieut. Sig. Corps, U. S. A., Mar. 3, 1863; mustered out Oct. 6, 1863.
				Private City Guard, 4th Inf., Nov. 8, 1870; 1st Lieut. and Paymaster, 4th Inf., April 26, 1872; reappointed Nov. 28, 1874; Capt. and A. D. C., 4th Brig., Jan. 31, 1877; Maj. and Inspector of Rifle Practice, 4th Brig., May 1, 1878; retired with rank from May 1, 1878.
				Private Co. C, 1st Inf., July 20, 1865; Sergt., Jan. 1, 1867; 2d Lieut., Dec. 4, 1871; term expired Jan. 4, 1875; 2d Lieut., Jan. 8, 1877; 1st Lieut. and Insp. of Rifle Prac., 1st Inf., May 7, 1878; Major and Insp. of Rifle Prac., 2d Brig., April 29, 1879; retired with rank from April 29, 1879.

TABLE H—Continued.

NAME.	Rank.	Date of Order.	No. of Order.	Original Entry into Service, and Subsequent Service and Commission in this State.
William Simpson-----	Maj. and Surg., 5th Inf.	April 26, 1886.	S. O., No. 17.	Appointed Maj. and Surg., 5th Inf., March 3, 1882; retired with rank from March 3, 1882.
Joseph R. Houghton --	Maj. and Com'y, 5th Brig.	Oct. 15, 1886.	S. O., No. 53.	Appointed Maj. and Com'y, 5th Brig., June 9, 1876; retired with rank from June 9, 1876. <i>Service in other States, and the United States.</i> —Private Co. B, 15th Mass. Vols., June 10, 1861; mustered into U. S. service July 10, 1861; transf'd to Light Battery I, 1st U. S. Art., Oct., 1862; discharged July 10, 1864.
Charles Faulkner-----	Maj. and Eng., 5th Brig.	Aug. 10, 1886.	S. O., No. 55.	Appointed Maj. and Eng., 5th Brig., April 21, 1876; retired with rank from April 21, 1876.
Gorham G. Kimball ---	Maj. and Brig. Insp., 5th Brig.	Mar. 1, 1887.	S. O., No. 12.	Appointed Maj. and Eng., 5th Brig., April 21, 1876; transf'd to Inspector's Dept., May 6, 1876; retired with rank from April 21, 1876.
Joseph S. Cone	Maj. and Ord. Officer, 5th Brig.	Mar. 1, 1887.	S. O., No. 13.	Appointed Maj. and Ord. Officer, 5th Brig., Oct. 10, 1876; retired with rank from Oct. 10, 1876.
George Whitney Reed..	Maj. and Military Instructor.	April 6, 1887.	S. O., No. 23.	Enlisted in Co. F, 1st Inf., Aug. 4, 1877; Sergt., May 25, 1878; 1st Sergt., Jan. 2, 1879; 2d Lieut., April 1, 1879; 1st Lieut., Aug. 19, 1879; Capt. and A. D. C., 2d Brig., March 8, 1880; resigned July 16, 1880; 1st Lieut. and Adj., 1st Inf., July 16, 1880; Capt. and Adj., 1st Inf., March 4, 1881; Maj. and Assist. Adj.-Gen., 2d Brig., June 9, 1881; resigned May 25, 1883; Capt. and Adj., 1st Inf., May 25, 1883; Maj. and Military Instructor, June 25, 1885; retired with rank from June 25, 1885.
George W. Tack-----	Maj. and Paymaster, 6th Brig.	Mar. 30, 1887.	S. O., No. 21.	Appointed Maj. and Paymaster, 6th Brig., April 19, 1876; retired with rank, April 19, 1876.
James E. Murphy ----	Maj. and Quartermaster, 6th Brig.	Mar. 30, 1887.	S. O., No. 20.	Appointed Maj. and Q. M., 6th Brig., April 19, 1876; retired with rank from April 19, 1876.
L. F. Cooper-----	Maj. and Engineer, 6th Brig.	April 16, 1887.	S. O., No. 27.	Appointed Maj. and Eng. Officer, 6th Brig., April 19, 1876; retired with rank from April 19, 1876.
Fred. Neary -----	Maj., 1st Art.	Aug. 15, 1889.	S. O., No. 35.	Elected 2d Lieut. Co. G, 1st Bat. of Inf. (now 1st Art.), 4th Brig., Feb. 16, 1878; Capt. and Adj., 1st Art., Nov. 5, 1881; Maj., 1st Art., April 7, 1887; retired with rank from April 7, 1887.
Samuel M. Woods-----	Maj. and Insp., 3d Brig.	June 24, 1887.	S. O., No. 37.	Appointed Maj. and Com'y 3d Brig., Feb. 26, 1880; transferred to Inspector's Dept., Sept. 26, 1882; to Assist. Adj.-Gen., 3d Brig., Aug. 1, 1885; term expired Oct. 21, 1886; appointed 1st Lieut. and Com'y, 6th Inf., Nov. 5, 1886; Maj. and Insp., 3d Brig., June 24, 1887.
John P. Kennedy -----	Maj., 1st Art.	Mar. 13, 1890.	S. O., No. 4.	Enlisted in Co. G, 1st Art., Sept. 26, 1886; Corp., Jan. 20, 1887; Sergt., July 12, 1887; 1st Lieut. and Sig. Officer, 1st Art., June 9, 1888; Maj., 1st Art., July 26, 1889; retired with rank from July 26, 1889. <i>Service in other States, and the United States.</i> —Enlisted in 1st U. S. Cav., Jan. 15, 1880; served as Corp. and Sergt., Troop B, and Post

William C. Little.....	Capt. Oakland Light Cav.	Mar. 2, 1882...	S. O., No. 13...	Sergt.-Maj., Fort Colville, W. T.; discharged; Sergt. Troop B, at Fort Keogh, M. T., Jan. 14, 1886. Private City Guard (Indep.), Sept. 18, 1856 (mustered in Cal. State Militia, March 11, 1858); brevet 2d Lieut., Mar. 11, 1858; 2d Lieut., April 24, 1860; Major and A. D. C. 1st Div., May 29, 1860; reappointed, 1861; Adjlt., 1st Inf., 1862; Capt. Co. B, 1st Inf., Aug. 8, 1862; Major 1st Inf., Oct. 5, 1863; Lieut.-Col. 1st Inf., March 14, 1868; resigned, 1868; Capt. Oakland Guard, 1868; resigned, 1869; Capt. Oakland Light Cav., July, 1877 (mustered into N. G. Co., Sept. 23, 1878); Capt., Sept. 23, 1878; retired with rank from Sept. 23, 1878.
Michael Grearney	Capt. Co. C, 1st Cav....	July 2, 1881...	S. O., No. 45...	Elected Capt. Co. C, 1st Bat. of Cav., Jan. 12, 1871; reflected, 1875, 1875, 1877, and 1879; retired with rank from Jan. 12, 1871.
Patrick J. Tannian	Capt. and Adjlt., 3d Inf.	June 25, 1881...	S. O., No. 40...	Appointed 1st Lieut. and Adjlt., 3d Inf., May 1, 1871; Capt., March 4, 1881; retired with rank from March 4, 1881.
Daniel J. Sullivan	Capt. Co. D., 3d Inf....	June 25, 1881...	S. O., No. 37...	Elected 2d Lieut. Co. D, 1st Battalion of Inf., May 15, 1868; 1st Lieut., March 10, 1869 (battalion created 3d Regt. of Inf.); reflected April 2, 1873, and March 31, 1875; Capt., May 3, 1876; reflected May 8, 1878, and May 27, 1880; retired with rank from May 3, 1876.
Ludwig Siebe.....	Capt. Co. C, 2d Inf....	Oct. 19, 1880...	S. O., No. 60...	Enlisted in Co. C, 2d Inf., Nov. 27, 1871; 1st Lieut., Nov. 27, 1871; reflected Dec. 1, 1873, and Nov. 29, 1875; Capt., Jan. 8, 1877; re-elected Capt., Jan. 6, 1879; retired with rank from Jan. 8, 1877. <i>Service in other States, and the United States.</i> —Enlisted in Co. G, 133d N. Y. Vols., Aug. 24, 1862; discharged at Washington, D. C., June 6, 1865; enlisted in Co. K, 28th Regt., N. Y. N. G., Dec. 11, 1865; discharged as Sergt., July 12, 1867.
Edwin F. Sellick	Capt. Co. F, 6th Inf....	Dec. 15, 1888...	S. O., No. 3...	Enlisted in Co. B, 1st Inf., June 24, 1872; Corp., Dec. 10, 1872; Sergt., April 19, 1873; 1st Sergt., Sept. 5, 1874; 2d Lieut., April 1, 1875; 1st Lieut., April 5, 1877; reflected April 5, 1879; Capt., July 26, 1880; retired, Nov. 14, 1881; commissioned Capt. Co. F, 6th Inf., Jan. 25, 1888; retired with rank from July 26, 1880.
William T. Adel.....	Capt. Co. B, 5th Inf., 2d Brig.	Nov. 29, 1882...	S. O., No. 62...	Private Co. B, 5th Inf., Dec. 6, 1864; Jan. 2d Lieut., March 11, 1865; 1st Lieut., Sept. 21, 1869; Capt., Oct. 19, 1871; reflected Nov. 4, 1873; resigned July 7, 1874; Capt. (same company), Feb. 7, 1878; reflected Feb. 7, 1880; reflected Feb. 7, 1882; retir'd with rank from Feb. 7, 1878.
George Bigley.....	Capt. Co. H, 2d Art....	Feb. 17, 1883...	S. O., No. 13...	Elected 1st Lieut. Co. H, 2d Inf., June 4, 1873; Capt., Dec. 30, 1874; (regiment changed from infantry to artillery, June 1, 1881); retired with rank from Dec. 30, 1874.
James Armstrong	Capt. Co. C, 5th Inf....	April 28, 1883...	S. O., No. 28...	Private Petaluma Guard, 1861; 2d Lieut., June 18, 1862; Capt., Aug. 15, 1862; Major, 1st Inf., Aug. 15, 1864; mustered out Jan. 1, 1868; Capt. (Huston Guard) Co. C, 5th Inf., June 29, 1869; retired with rank from June 29, 1869. <i>Service in other States, and the United States.</i> —Cadet U. S. N. in 1840; served five years private 1st Maryland and D. C. Inf., April 13, 1846; served from the Rio Grande to the City of Mexico; twice in a forlorn hope; discharged at Vera Cruz, Mexico, July 18, 1848.

TABLE H—Continued.

NAME.	Rank.	Date of Order.	No. of Order.	Original Entry into Service, and Subsequent Service and Commission in this State.
Robert Cleary	Capt. Co. A, 3d Inf.	Feb. 18, 1890	S. O., No. 21	Enlisted in Co. H, 2d Inf., Jan., 1863; 2d Lieut., Nov., 1864; 1st Lieut., 1865; mustered out Oct., 1866; elected Capt. Co. E, 1st Inf., May 15, 1868 (1st Inf. Bat. was created a regiment in 1876 and designated as the 3d Regt. of Inf.); mustered out on Nov. 20, 1880 (Co. E continued its organization as an independent company, and was mustered into the service April 18, 1883, as Co. A, 3d Inf.); elected Capt., April 18, 1883; reelected April 25, 1885; reelected May 5, 1887; retired with rank from April 18, 1883.
J. P. Dalton	Capt. Co. G, 1st Art.	May 23, 1883	S. O., No. 37	<i>Service in other States, and the United States.</i> —Enlisted for general service in 1847; transferred to 1st U. S. Art., Co. L; served in the Mexican War; discharged at Fort Columbus, N. Y., in Oct., 1849. Elected 2d Lieut., Co. G, 1st Art., March 24, 1875; reelected March 14, 1877; 1st Lieut., Feb. 6, 1878; reelected Feb. 2, 1880; Capt., Nov. 21, 1881; retired with rank from Nov. 21, 1881.
Josiah P. Brown	Capt. Co. E, 1st Art.	Nov. 9, 1883	S. O., No. 77	Elected Capt. Co. E, 1st Art., Nov. 7, 1863; reelected 1865, 1867, 1869, 1871, 1873, 1875, 1877, 1879, and 1880; retired with rank from Nov. 7, 1863.
Frank O'Grady	Capt. Co. D, 5th Inf.	June 20, 1884	S. O., No. 34	Elected Capt. Co. D (Vallejo Rifles), 5th Inf., May 5, 1874; reelected May 10, 1876, May 14, 1878, May 12, 1880, May 10, 1882; retired with rank from May 5, 1874.
Herman S. Templeton	Capt. Co. C, 1st Inf.	Feb. 25, 1885	S. O., No. 11	Elected 1st Lieut. Co. C, 1st Inf., Jan. 8, 1877; Capt., Jan. 6, 1879; reelected Jan. 3, 1881; retired with rank from Jan. 6, 1879.
Vincent Kingwell	Capt. Co. D, 1st Inf.	Dec. 27, 1886	S. O., No. 67	Enlisted in Co. D, 1st Inf., April 17, 1865; elected 2d Lieut. Co. D, 1st Inf., May 12, 1876; 1st Lieut., June 11, 1879; reelected Sept. 21, 1881; Capt., Oct. 29, 1884; retired with rank from Oct. 29, 1884.
William R. Williams	Capt. and A. D. C., 5th Brig.	Mar. 25, 1887	S. O., No. 16	Enlisted in Chicago Guard, 5th Brig., April 30, 1875; reelected April 30, 1878; 2d Lieut., Aug. 30, 1878; 1st Lieut., Dec. 22, 1879; reelected Dec. 22, 1882; Capt. and A. D. C. to commander 5th Brig., June 13, 1885; retired with rank from June 13, 1885.
James E. Hughes	Capt. Co. F, 7th Inf.	Nov. 23, 1888	S. O., No. 51	<i>Service in other States, and the United States.</i> —Private Co. D, 39th New Jersey Inf. Vols., Sept. 29, 1864; discharged June 28, 1865. Elected 1st Lieut. Co. B, 2d Inf., Nov. 18, 1868; Capt., Dec. 16, 1868; reelected March 10, 1871; elected Capt. Co. F, 1st Inf., Aug. 15, 1871; reelected March 9, 1873, and Sept. 21, 1875; Major 1st Inf., Dec. 1, 1877; retired as Major, 1st Inf., Aug. 5, 1880; detailed, at request of Col. W. R. Smeilberg, Ord. Officer 2d Inf., Nov. 6, 1880; elected Major, 2d Artillery, March 10, 1881; retired as Major, 2d Art., April 7, 1885; elected Capt. Co. F, 7th Inf., Dec. 20, 1887; retired with rank from Dec. 20, 1887.

J. B. Amerman	Capt. and Adj't., 2d Art.	April 1, 1890	S. O., No. 7	<i>Service in other States, and the United States.</i> —Commissioned 1st Lieut. Co. C, 2d Cal. Inf., Vols., Jan. 5, 1865; must'd out Jan. 28, 1866. Appointed 1st Lieut. and Q. M., 2d Art., June 16, 1887; Capt. and Adj't., Dec. 20, 1887; retired with rank from Dec. 20, 1887.
William Corcoran	1st Lieut. and Q. M., 1st Cav.	Dec. 31, 1879	S. O., No. 41	<i>Service in other States, and the United States.</i> —Served 14 years and 9 months in the 7th Reg't., N. Y. N. G., and participated in the campaigns of 1861, 1862, and 1863.
George W. Chapin	1st Lieut. Co. A, Lt. Bat.	June 24, 1879	S. O., No. 20	Appointed 1st Lieut. and Q. M., 1st Cav., March 3, 1869; retired with rank from March 3, 1869.
Peter B. Quinlan	1st Lieut. Co. A, Gat. Bat.	Oct. 26, 1880	S. O., No. 61	Elected 1st Lieut. 1st. Cal. Guard, Light Battery A, June 1, 1869; Senior 1st Lieut., Jan. 6, 1873; reelected April 5, 1875, 1877; retired with rank from June 1, 1881.
Calvin Nuttings, Jr.	1st Lieut. and Q. M., 1st Cav.	Sept. 17, 1881	S. O., No. 66	Elected 1st Lieut. Co. A, Gat. Bat., Sept. 19, 1876; reelected, Oct. 15, 1878; retired with rank from Sept. 19, 1876.
William Newman	1st Lieut. and Q. M., 2d Inf.	Aug. 13, 1880	S. O., No. 53	Appointed 1st Lieut. and Q. M., 1st Cav., Sept. 25, 1878; retired with rank from Sept. 25, 1878.
Nathan Rogers	1st Lieut. and Com'y, 1st Cav.	June 25, 1881	S. O., No. 42	Appointed 1st Lieut. and Q. M., 2d Inf., Feb. 13, 1879; retired with rank from Feb. 13, 1879.
David Tobias	1st Lieut. and Com'y, 1st Art.	May 15, 1888	S. O., No. 27	Elected 2d Lieut. Co. B, 1st Cav., July 28, 1873; 1st Lieut. and Com'y, 1st Cav., July 27, 1880; retired with rank from July 27, 1880.
John McCully	1st Lieut. and Paymaster, 3d Inf.	May 6, 1882	S. O., No. 30	Appointed 1st Lieut. and Com'y, 1st Art., 4th Brig. Nov. 5, 1881; retired with rank from Nov. 5, 1881.
James Kip	1st Lieut. and Paymaster, 1st Inf.	June 30, 1882	S. O., No. 36	Elected 1st Lieut. Co. A, 3d Inf., Feb. 3, 1874; reelected Feb. 15, 1876, and Feb. 12, 1878; appointed 1st Lieut. and P. M., 3d Inf., Feb. 13, 1880; retired with rank, Feb. 13, 1880.
John Miller	1st Lieut. and Insp. Rifle Prac., 1st Art.	June 2, 1890	S. O., No. 20	Appointed 1st Lieut. and Paymaster, 1st Inf., Dec. 13, 1876; retired with rank from Dec. 13, 1876.
George L. Reynolds	1st Lieut. and Q. M., 2d Art.	Jan. 5, 1883	S. O., No. 2	<i>Service in other States, and the United States.</i> —Served in Co. F, 28th New York Volunteers.
James N. Pike	1st Lieut. Co. F, 2d Art.	July 31, 1882	S. O., No. 40	Appointed 1st Lieut. and Insp. of Rifle Practice, 1st Art., April 19, 1882; retired with rank from April 20, 1882.
				Private Co. B, 1st Inf., March 27, 1863; private Light Battery A (1st California Guard), Sept. 9, 1869; Sen. 2d Lieut., Jan. 6, 1873; Jun. 1st Lieut., April 5, 1875; Major and A. D. C., Division, Aug. 1, 1877; Sen. 2d Lieut., Light Battery (B) A, 2d Art., Jan. 30, 1882; 1st Lieut. and Q. M., 2d Art., Sept. 1, 1882; retired with rank from Sept. 1, 1882.
				Enlisted in Co. K, 1st Art., Oct. 20, 1863; transf'd to Co. A, 1st Inf., Feb. 3, 1864; Serg't., Sept. 9, 1867; Gen. Guide, Jan. 6, 1868; Serg't.-Maj., Jan. 26, 1869; exempt certificate, April 5, 1871; relieved from duty as Serg't.-Maj., and ordered to Co. C at own request, as per R. O. 8, May 1, 1871; disch'd May 15, 1871; enlisted in Co. F, 2d Inf., April 3, 1878; Serg't., June 25, 1878; 1st Serg't., Nov. 29, 1878; 2d Lt., Nov. 6, 1880; 1st Lt., June 28, 1881; retired with rank from June 28, 1881; on special duty as Sig. Officer, 2d Art., Dec. 2, 1887.

TABLE H—Continued.

NAME.	Rank.	Date of Order.	No. of Order.	Original Entry into Service, and Subsequent Service and Commission in this State.
J. G. McLellan	1st Lieut. Co. E, 1st Art.	Nov. 9, 1883...	S. O., No. 77 ..	First Lieut. Co. E, 1st Art., 4th Brig., Nov. 7, 1863; returned to ranks, 1869; 1st Lieut., Jan. 9, 1875; retired with rank from Jan. 9, 1875.
A. S. Peterson	1st Lieut. and Paymaster, 1st Inf.	June 28, 1886...	S. O., No. 33 ..	Appointed 1st Lieut. and Paymaster, 1st Inf., March 13, 1884; retired with rank from March 13, 1884.
Frank Buxton	1st Lieut. and Ord. Officer, 1st Inf.	April 19, 1887...	S. O., No. 28 ..	Elected 2d Lieut. Co. A, 1st Cav., March 24, 1879; 1st Lieut. and Ord. Officer, 1st Inf., July 16, 1880; retired with rank from July 16, 1880.
Charles T. Wilson	2d Lieut. Co. H, 1st Inf.	June 3, 1882...	S. O., No. 34 ..	Private Co. H, 1st Inf., —, 1871; Regtl. Color Sergt., March 12, 1872; 2d Lieut. Co. H, 1st Inf., Jan. 24, 1878; reelected April 15, 1880; retired with rank from Jan. 24, 1878.
				<i>Service in other States, and the United States.</i> —Private Rochester Union Grays, 54th Regt. Inf., N. Y. S. M., from 1847 to May, 1850; private Veteran Corps, same company.
Edward M. Greenway	2d Lieut. Co. B, 2d Art.	Mar. 31, 1884...	S. O., No. 18 ..	Elected 2d Lieut. Light Battery (B) A, 2d Art., Feb. 20, 1883; retired with rank from Feb. 20, 1883.
C. McC. Campbell	2d Lieut. Co. A, 5th Inf.	Aug. 7, 1885...	S. O., No. 44 ..	Elected 2d Lieut. Co. A, 5th Inf., Dec. 12, 1881; retired with rank from Dec. 12, 1881.
Otto Lemck	2d Lieut., Co. C, 2d Art.	Nov. 27, 1888...	S. O., No. 53 ..	Enlisted in Co. C, 2d Inf., 2d Brig., Dec. 6, 1875; Corp., May 21, 1879; Sergt., Oct. 6, 1879; 1st Sergt., Dec. 3, 1883; reduced to ranks at own request, Nov. 1, 1885; appointed R. G. Guide, July 12, 1886; Regtl. Com'y Sergt., Jan. 11, 1887; 2d Lieut. Co. C., April 25, 1887; retired with rank from April 25, 1887.

TABLE I.

COMMISSIONS ISSUED TO OFFICERS OF THE N. G. C., FROM JULY 1, 1888, TO SEPTEMBER 1, 1890.

NAME.	Rank.	Office and Organization.	Date of Rank.
Allen, Chas. C.	Major	Inspector, 1st Brigade	Mar. 14, 1889
Austin, John L.	Captain	Co. D, 5th Inf., 2d Brigade	Sept. 13, 1889
Bainbridge, C. E.	1st Lieut.	Co. D, 6th Inf., 3d Brigade	June 13, 1888
Burtis, Robert W.	1st Lieut.	Ord. Off., 1st Inf., 2d Brigade	July 14, 1888
Bratt, Walter E.	Captain	Co. D, 7th Inf., 1st Brigade	June 30, 1888
Bower, Geo. H.	2d Lieut.	Co. B, 7th Inf., 1st Brigade	July 30, 1888
Burns, James T.	1st Lieut.	Co. B, 3d Inf., 2d Brigade	Sept. 10, 1888
Burgin, J. Fred.	1st Lieut.	Ord. Off., 5th Inf., 2d Brigade	Oct. 19, 1888
Boxton, Chas.	1st Lieut.	Co. C, 2d Art., 2d Brigade	Dec. 17, 1888
Birdsall, Alfred W.	Major	Military Instructor	Jan. 15, 1889
Britton, Wm. W.	1st Lieut.	Qrm., 2d Art., 2d Brigade	Feb. 13, 1889
Butler, Lysander S.	Lieut.-Col.	Asst. Adjt.-Gen'l, 1st Brigade	Mar. 20, 1889
Barrett, Andrew W.	Major	Quartermaster, 1st Brigade	Mar. 14, 1889
Bonebrake, Geo. H.	Major	Paymaster, 1st Brigade	Mar. 14, 1889
Brown, James B.	Lieut.-Col.	Asst. Adjt.-Gen., 6th Brigade	Mar. 20, 1889
Bedford, John F.	2d Lieut.	Co. F, 6th Inf., 3d Brigade	Mar. 21, 1889
Bloeser, John	1st Lieut.	I. R. P., 7th Inf., 1st Brigade	Apr. 4, 1889
Brown, James A.	2d Lieut.	Cadet Co., 1st Inf., 2d Brigade	Apr. 1, 1889
Brown, James A.	1st Lieut.	Cadet Co., 2d Inf., 2d Brigade	Apr. 24, 1889
Baker, H. C. W.	1st Lieut.	Co. A, 6th Inf., 3d Brigade	May 13, 1889
Bonner, Chas. G.	Major	University Cadets	June 26, 1889
Burtis, Robt. W.	Captain	Adjt., 1st Inf., 2d Brigade	Sept. 21, 1889
Bryant, Sumner C.	2d Lieut.	Co. A, 9th Inf., 1st Brigade	Sept. 7, 1889
Baker, P. Y.	1st Lieut.	Qrm., 6th Inf., 3d Brigade	Oct. 17, 1889
Berry, Joseph	1st Lieut.	Co. A, 2d Art., 2d Brigade	Sept. 20, 1889
Baldwin, Fred'k A.	2d Lieut.	Co. B, 1st Inf., 2d Brigade	Oct. 28, 1889
Bedford, John F.	1st Lieut.	Co. F, 6th Inf., 3d Brigade	Oct. 10, 1889
Brown, Wm. E.	1st Lieut.	Signal Off., 1st Inf., 2d Brigade	Nov. 25, 1889
Baldwin, Geo. B.	Captain	Co. A, 8th Inf., 5th Brigade	Dec. 19, 1889
Brown, Albert W.	2d Lieut.	Co. D, 7th Inf., 1st Brigade	Dec. 30, 1889
Buckley, Lawrence	Captain	Co. B, 7th Inf., 1st Brigade	Dec. 23, 1889
Browning, Ernest	2d Lieut.	Co. G, 7th Inf., 1st Brigade	Dec. 19, 1889
Barry, Thos. F.	Colonel	3d Inf., 2d Brigade	Jan. 18, 1890
Boyd, Geo. D.	Captain	Aid-de-Camp, 2d Brigade	Feb. 7, 1890
Bryant, Geo. L.	Lieut.-Col.	9th Inf., 1st Brigade	Feb. 8, 1890
Batchelder, H. T.	Lieut.-Col.	Asst. Adjt.-Gen., 5th Brigade	Mar. 6, 1890
Batchelder, Henry L.	2d Lieut.	Co. D, 2d Art., 2d Brigade	Jan. 29, 1890
Ball, Chas. D.	2d Lieut.	Co. F, 9th Inf., 1st Brigade	Mar. 17, 1890
Berry, John R.	2d Lieut.	Co. A, 9th Inf., 1st Brigade	Mar. 13, 1890
Brosnan, Jas. A.	2d Lieut.	Co. H, 3d Inf., 2d Brigade	Feb. 20, 1890
Bolger, Miles J.	1st Lieut.	Co. A, 3d Inf., 2d Brigade	Mar. 22, 1890
Bailey, Henry F.	Major	University Cadets	June 25, 1890
Birdsall, Alfred W.	1st Lieut.	Signal O., 9th Inf., 1st Brigade	June 20, 1890
Bonner, Walter G.	Captain	Adjt., 10th Inf., 6th Brigade	June 23, 1890
Buster, Wm. H.	Major	Signal O., 5th Brigade	July 4, 1890
Brunsen, John M.	2d Lieut.	San Francisco Hussars, 2d Brigade	July 2, 1890
Blossom, Ed. J.	2d Lieut.	Co. D, 8th Inf., 5th Brigade	June 19, 1890
Behnemann, Albert	1st Lieut.	Co. A, 2d Art., 2d Brigade	Aug. 1, 1890
Burgin, J. Fred.	Major	Inspector Rifle Prac., 2d Brigade	Aug. 11, 1890
Chisholm, Colin	Captain	Co. F, 6th Inf., 3d Brigade	Jan. 31, 1889
Cochran, Wm. G.	Lieut.-Col.	Surgeon, 1st Brigade	Mar. 14, 1889
Clark, Z. P.	Colonel	Asst. Adjt.-Gen., Division	Mar. 20, 1889
Collins, Ulric B.	2d Lieut.	Co. A, 8th Inf., 5th Brigade	Mar. 26, 1889
Confer, Sol., Jr.	2d Lieut.	Co. 8, 6th Inf., 3d Brigade	May 13, 1889
Cunningham, Thos. J.	2d Lieut.	Co. E, 2d Art., 2d Brigade	May 21, 1889
Callahan, C. W.	1st Lieut.	Ord. Officer, 6th Inf., 3d Brigade	June 24, 1889
Cutting, Eugene L.	Captain	Cadet Co., 1st Inf., 2d Brigade	Aug. 31, 1889
Colmery, Wm. W.	2d Lieut.	Co. F, 7th Inf., 1st Brigade	July 15, 1889
Crume, Littleton T.	2d Lieut.	Co. E, 8th Inf., 5th Brigade	Dec. 19, 1889
Campbell, James H.	2d Lieut.	Co. B, 7th Inf., 1st Brigade	Dec. 23, 1889
Cadwallader, Rowllins	Captain	Adjt., 9th Inf., 1st Brigade	Mar. 5, 1890
Collins, Ulric B.	Captain	Adjt., 8th Inf., 5th Brigade	May 28, 1890
Cone, Douglas	1st Lieut.	Paymaster, 8th Inf., 5th Brigade	May 28, 1890
Chamberlin, J. D. H.	Major	10th Inf., 6th Brigade	May 13, 1890
Cahill, John J.	2d Lieut.	Co. A, 8th Inf., 5th Brigade	June 18, 1890
Cunningham, Thos. J.	1st Lieut.	Co. E, 2d Art., 2d Brigade	Apr. 1, 1890
Cutten, David	Captain	Aid-de-Camp, 6th Brigade	July 19, 1890
Chappelear, Louis S.	2d Lieut.	Co. F, 7th Inf., 1st Brigade	Aug. 4, 1890

TABLE I—Continued.

NAME.	Rank.	Office and Organization.	Date of Rank.
Drifftill, James A.	1st Lieut.	Co. D, 7th Inf., 1st Brigade	June 30, 1888
Drady, Thomas	1st Lieut.	Commissary, 3d Inf., 2d Brigade	Aug. 1, 1888
Drifftill, James A.	Captain	Co. D, 7th Inf., 1st Brigade	Nov. 24, 1888
Duboce, Victor D.	Captain	Aid-de-Camp, 2d Brigade	Apr. 17, 1889
Drew, Harvey L.	Major	Engineer, 1st Brigade	July 19, 1889
Dunbar, John	2d Lieut.	Co. E, 5th Inf., 2d Brigade	June 3, 1889
Drew, Harvey L.	Lieut.-Col.	Aid-de-Camp, Com'der-in-Chief	Sept. 4, 1889
Davenport, John P.	2d Lieut.	Co. D, 5th Inf., 2d Brigade	Sept. 13, 1889
Dazier, Thos. P.	1st Lieut.	Co. E, 8th Inf., 5th Brigade	Dec. 19, 1889
Duboce, Victor D.	Major	Quartermaster, 2d Brigade	Feb. 7, 1890
Dohrmann, A. B. C.	Captain	Co. D, 2d Art., 2d Brigade	Jan. 29, 1890
Dannals, Harry C.	1st Lieut.	Co. B, 9th Inf., 1st Brigade	Feb. 14, 1890
Ducoc, Earl M.	2d Lieut.	Co. E, 9th Inf., 1st Brigade	Mar. 10, 1890
Drady, Thomas	1st Lieut.	I. R. P., 3d Inf., 2d Brigade	Apr. 25, 1890
Dillon, Thos. I.	1st Lieut.	Commissary, 3d Inf., 2d Brigade	Apr. 25, 1890
Dwyer, John J.	1st Lieut.	Paymaster, 3d Inf., 2d Brigade	Apr. 25, 1890
Denicke, Ernst A.	Lieut.-Col.	Signal Officer, Division	May 23, 1890
Dixon, L. L.	Major	Commissary, 3d Brigade	May 31, 1890
Dunn, Sterling P.	1st Lieut.	I. R. P., 8th Inf., 5th Brigade	May 28, 1890
Demarest, David C.	1st Lieut.	University Cadets	June 25, 1890
Dean, Richard F.	1st Lieut.	University Cadets	June 25, 1890
Dwyer, John J.	1st Lieut.	Quartermaster, 3d Inf., 2d Brigade	Aug. 26, 1890
Edwards, William	Major	Quartermaster, 2d Brigade	Apr. 17, 1889
Eisen, Edward G.	2d Lieut.	Co. H., 1st Inf., 2d Brigade	June 18, 1889
Edwards, William	Lieut.-Col.	Asst. Adjt.-General, 2d Brigade	Aug. 29, 1889
Eckley, H. W.	Major	Military Instructor	Sept. 8, 1889
Elliott, William	1st Lieut.	Co. D, 5th Inf., 2d Brigade	Nov. 15, 1889
Ellis, William T., Jr.	2d Lieut.	Co. C, 8th Inf., 5th Brigade	Dec. 19, 1889
Eby, Thomas M.	2d Lieut.	Co. D, 8th Inf., 5th Brigade	Dec. 19, 1889
Ellwell, Charles E.	Captain	Co. D, 7th Inf., 1st Brigade	Dec. 30, 1889
Eggert, J. F.	2d Lieut.	Co. F, 1st Inf., 2d Brigade	Mar. 6, 1890
Emmons, Edward L.	2d Lieut.	Co. C, 5th Inf., 2d Brigade	Apr. 7, 1890
Evans, Charles J.	1st Lieut.	Sig. Off., 2d Art., 2d Brigade	June 6, 1890
Emmons, Edward L.	1st Lieut.	Co. C, 5th Inf., 2d Brigade	July 28, 1890
Foster, Marcus A.	Major	Insp. Rifle Practice, 1st Brig.	July 5, 1888
Fairbanks, Rolla D.	1st Lieut.	Co. G, 2d Art., 2d Brigade	Aug. 29, 1888
Faulkers, George H.	2d Lieut.	Cadet Co, 1st Inf., 2d Brigade	Apr. 24, 1889
Fitzpatrick, Edward	2d Lieut.	Co. D, 3d Inf., 2d Brigade	Aug. 28, 1889
Fairbanks, D. B.	Lieut.-Col.	5th Inf., 2d Brigade	Oct. 26, 1889
Foster, George E.	1st Lieut.	Ord. Off., 9th Inf., 1st Brigade	Mar. 5, 1890
Foley, Daniel J.	1st Lieut.	Co. A, 10th Inf., 6th Brigade	Apr. 2, 1890
Foley, Daniel	Captain	Co. A, 3d Inf., 2d Brigade	Mar. 22, 1890
Fairbanks, D. B.	Colonel	5th Inf., 2d Brigade	Apr. 26, 1890
Franklin, John B.	1st Lieut.	Co. F, 7th Inf., 1st Brigade	May 19, 1890
Freese, Samuel W.	Major	Sig. Off., 6th Brigade	June 27, 1890
Fitzpatrick, Edward	1st Lieut.	Co. D, 3d Inf., 2d Brigade	June 8, 1890
Glas, Philip J.	Captain	Co. A., 1st Art., 4th Brigade	July 12, 1888
Glick, J.	1st Lieut.	Sig. Off., 6th Inf., 3d Brigade	Jan. 25, 1889
Gibson, William M.	Lieut.-Col.	Asst. Adjt.-Gen., 3d Brigade	Mar. 20, 1889
Gross, Reuben	Lieut.-Col.	Surgeon, 6th Brigade	Apr. 29, 1889
Gumby, Joseph H.	1st Lieut.	Co. A., 8th Inf., 5th Brigade	Mar. 26, 1889
Geary, Dennis	Major	2d Art., 2d Brigade	May 23, 1889
Gett, William A.	1st Lieut.	Ord. Off., 1st Art., 4th Brigade	Nov. 22, 1889
Greater, Luther D.	2d Lieut.	Co. B, 10th Inf., 6th Brigade	Dec. 21, 1889
Greely, Frederick H.	Major	Commissary, 5th Brigade	May 1, 1890
Gaston, Hilar B.	Captain	Adj., 5th Inf., 2d Brigade	May 15, 1890
Gielow, Edward H.	2d Lieut.	Co. D, 1st Inf., 2d Brigade	Apr. 9, 1890
Grotefend, Frederick	1st Lieut.	Ord. Off., 8th Inf., 5th Brigade	May 28, 1890
Greer, W. Walter	Captain	Adj., 1st Art., 4th Brigade	June 7, 1890
Humphreys, H. B.	2d Lieut.	Co. A, 1st Art., 4th Brigade	July 12, 1888
Hayes, John F.	1st Lieut.	Co. F, 5th Inf., 2d Brigade	Nov. 5, 1888
Howland, James L.	1st Lieut.	Co. D, 7th Inf., 1st Brigade	Nov. 24, 1888
Hunt, Edwin G.	2d Lieut.	Co. F, 5th Inf., 2d Brigade	Feb. 18, 1889
Henshaw, Park	Lieut.-Col.	Asst. Adjt.-Gen., 5th Brigade	Mar. 20, 1889
Holloway, W. E.	Lieut.-Col.	Signal Officer, Division	May 10, 1889
Hutchinson, Lincoln	Captain	University Cadets	June 26, 1889
Holmes, Chas. E.	1st Lieut.	University Cadets	June 26, 1889
Hayne, Arthur P.	1st Lieut.	University Cadets	June 26, 1889
Horton, H. L.	2d Lieut.	Cadet Co., 1st Inf., 2d Brigade	Oct. 8, 1889
Hughes, James E.	Major	Engineer, 3d Brigade	Nov. 6, 1889

TABLE I—Continued.

NAME.	Rank.	Office and Organization.	Date of Rank.
Hamilton, Arthur L.	1st. Lieut.	Co. B, 7th Inf., 1st Brigade.	Dec. 23, 1889
Hogan, Chas. A.	Captain.	Co. B, 5th Inf., 2d Brigade.	Dec. 26, 1889
Henshaw, Park.	Lieut.-Col.	8th Inf., 5th Brigade.	Feb. 27, 1890
Harville, John S.	1st Lieut.	Paymaster, 9th Inf., 1st Brigade.	Mar. 5, 1890
Hartley, Arthur G.	1st Lieut.	Co. A, 9th Inf., 1st Brigade.	Mar. 13, 1890
Hughes, Jerome A.	Major.	Surgeon, 3d Inf., 2d Brigade.	Mar. 31, 1890
Hamilton, Geo. W.	Captain.	Co. B, 8th Inf., 3d Brigade.	April 16, 1890
Hopkins, Robert E.	1st Lieut.	Co. F, 1st Art., 4th Brigade.	April 26, 1890
Hevel, Jariet B.	2d Lieut.	Co. F, 1st Art., 4th Brigade.	April 26, 1890
Holloway, W. E.	Lieut.-Col.	Engineer, Division.	June 4, 1890
Hogan, Patrick J.	2d Lieut.	Co. A, 3d Inf., 2d Brigade.	Mar. 22, 1890
Hill, Edward C.	1st Lieut.	University Cadets.	June 25, 1890
Hewitt, Leslie R.	1st Lieut.	University Cadets.	June 25, 1890
Halstead, William A.	1st Lieut.	Ord. Officer, 1st Inf., 2d Brigade.	July 12, 1890
Hayes, John F.	Captain.	Co. F, 5th Inf., 2d Brigade.	July 7, 1890
Hale, Marshal, Jr.	1st Lieut.	I. R. P., 1st Art., 4th Brigade.	July 30, 1890
Hunt, Edwin G.	1st Lieut.	Co. F, 5th Inf., 2d Brigade.	July 7, 1890
Hinshaw, Bright B.	Captain.	Co. C, 5th Inf., 2d Brigade.	July 28, 1890
Johnson, Edward P.	Brig.-Gen.	Commanding 1st Brigade.	Mar. 7, 1889
Jones, Albert C.	Captain.	Aid-de-Camp, 1st Brigade.	Mar. 14, 1889
Johnson, Presley B.	Captain.	Adjutant, 1st Art., 4th Brigade.	Oct. 30, 1889
Jennings, Wm. H.	2d Lieut.	Co. B, 1st Art., 4th Brigade.	Oct. 30, 1889
Jackson, Harry W.	1st Lieut.	Co. B, 10th Inf., 6th Brigade.	Dec. 21, 1889
Johnson, Presley B.	Major.	1st Art., 4th Brigade.	Mar. 29, 1890
Jones, David G.	Captain.	University Cadets.	June 25, 1890
Jenkins, Jabez A.	2d Lieut.	University Cadets.	June 25, 1890
Kenny, Francis H.	2d Lieut.	Co. H, 2d Art., 2d Brigade.	Jan. 9, 1889
Koster, John A.	Lieut.-Col.	Asst. Adjt.-Gen., 2d Brigade.	Mar. 20, 1889
Kay, Samuel.	1st Lieut.	Co. B, 1st Art., 4th Brigade.	July 15, 1889
Koster, John A.	Lieut.-Col.	2d Art., 2d Brigade.	July 31, 1889
Kennedy, John P.	Major.	1st Art., 4th Brigade.	July 26, 1889
Keith, James N.	Captain.	Co. C, 9th Inf., 1st Brigade.	Jan. 3, 1890
Kehrein, Emil A.	2d Lieut.	Co. B, 3d Inf., 2d Brigade.	Jan. 27, 1890
Kelleher, Alfred J.	1st Lieut.	Co. D, 2d Art., 2d Brigade.	Jan. 29, 1890
Kellogg, Sheldon I.	Lieut.-Col.	Insp'r of Rifle Practice of Division.	July 10, 1890
Kreuzberger, Gustave.	2d Lieut.	Co. B, 1st Art., 4th Brigade.	June 25, 1890
Lloyd, A. J.	1st Lieut.	Co. A, 1st Art., 4th Brigade.	July 12, 1888
Logan, Wm. E.	1st Lieut.	Co. C, 7th Inf., 1st Brigade.	July 11, 1888
Lehe, Eugene.	Colonel.	6th Inf., 3d Brigade.	Nov. 9, 1888
Lennon, Thomas J.	1st Lieut.	Co. E, 2d Art., 2d Brigade.	Aug. 14, 1888
Leo, J. H.	1st Lieut.	Co. H, 2d Art., 2d Brigade.	Jan. 9, 1889
Lazarus, Armond.	2d Lieut.	University Cadets.	June 26, 1889
Larkin, Thomas.	Captain.	Chaplain, 3d Inf., 2d Brigade.	June 29, 1889
Little, Robert.	1st Lieut.	Co. E, 1st Art., 4th Brigade.	Oct. 17, 1889
Lindberg, Edward A.	1st Lieut.	Co. D, 1st Inf., 2d Brigade.	Nov. 6, 1889
Lydon, John T.	1st Lieut.	Co. C, 8th Inf., 5th Brigade.	Dec. 19, 1889
Lee, Bruce B.	Captain.	Co. D, 8th Inf., 5th Brigade.	Dec. 19, 1889
Langworthy, Sam'l R.	2d Lieut.	Co. C, 9th Inf., 1st Brigade.	Jan. 3, 1890
Lewis, Arthur L.	1st Lieut.	Co. G, 7th Inf., 1st Brigade.	Dec. 19, 1889
Lewis, Edward B.	1st Lieut.	Co. B, 5th Inf., 2d Brigade.	Dec. 26, 1889
Loryea, Milton.	2d Lieut.	Co. B, 5th Inf., 2d Brigade.	Dec. 26, 1889
Lorbeer, Chas. I.	1st Lieut.	I. R. P., 9th Inf., 1st Brigade.	Mar. 5, 1890
Laine, Joseph R.	Colonel.	Surgeon of Division.	May 23, 1890
Lawton, Wm. D.	Captain.	Aid-de-Camp, 2d Brigade.	June 5, 1890
Lemmon, Thos. J.	Captain.	Co. E, 2d Art., 2d Brigade.	April 1, 1890
Lang, Norman R.	Colonel.	University Cadets.	June 25, 1890
Livingston, John A.	1st Lieut.	I. R. P., 10th Inf., 6th Brigade.	June 23, 1890
Montgomery, Wm.	1st Lieut.	Com'y, 2d Art., 2d Brigade.	June 26, 1888
Maguire, Jas. A.	1st Lieut.	Co. F, 2d Art., 2d Brigade.	Dec. 4, 1888
Murray, Robert E.	Captain.	Adjt., 6th Inf., 3d Brigade.	Mar. 1, 1889
Medley, Philo H.	2d Lieut.	Co. D, 6th Inf., 3d Brigade.	Mar. 20, 1889
Moffitt, Herbert C.	Colonel.	University Cadets.	June 26, 1889
Melvin, Henry A.	1st Lieut.	University Cadets.	June 26, 1889
Margo, Jas. A.	2d Lieut.	Co. F, 1st Inf., 2d Brigade.	June 6, 1889
M MacDonald, Wm.	Colonel.	2d Art., 2d Brigade.	May 23, 1889
Macdowell, Wm. B.	1st Lieut.	Q. M., 1st Art., 4th Brigade.	Nov. 29, 1889
Minns, Geo. F.	2d Lieut.	Co. F, 6th Inf., 3d Brigade.	Oct. 10, 1889
Mathews, Harry C.	1st Lieut.	Co. F, 9th Inf., 1st Brigade.	Jan. 6, 1890
Miles, David E.	Captain.	Aid-de-Camp, 2d Brigade.	Feb. 7, 1890
Mullin, Eugene J.	Captain.	Co. B, 10th Inf., 6th Brigade.	Dec. 21, 1890

TABLE I—Continued.

NAME.	Rank.	Office and Organization.	Date of Rank.
Mitchell, Burr H.	Major	8th Inf., 5th Brigade	Feb. 15, 1890
Moseley, Jos. F.	1st Lieut.	I. R. P., 6th Inf., 3d Brigade	Mar. 1, 1890
Mack, Jas. E.	1st Lieut.	Q. M., 9th Inf., 1st Brigade	June 18, 1890
Magee, Thos. L.	Major	Surgeon, 9th Inf., 1st Brigade	Mar. 5, 1890
Mathews, Harry T.	Captain	Co. F, 9th Inf., 1st Brigade	Mar. 17, 1890
Margo, Jas. A.	1st Lieut.	Co. F, 1st Inf., 2d Brigade	Mar. 6, 1890
Miles, David E.	Major	Signal Officer, 2d Brigade	June 5, 1890
Meyer, Theodore	1st Lieut.	Co. C, 7th Inf., 1st Brigade	May 21, 1890
Mack, Arthur F.	2d Lieut.	University Cadets	June 25, 1890
Marvin, Geo. D.	Major	Surgeon, 10th Inf., 6th Brigade	June 23, 1890
Mizner, Wm. G.	Major	Surgeon, 5th Inf., 2d Brigade	June 30, 1890
Murphy, John F.	2d Lieut.	Co. D, 3d Inf., 2d Brigade	June 8, 1890
McPherson, Jas. W.	2d Lieut.	Co. A, 7th Inf., 1st Brigade	Nov. 27, 1888
McHenry, Oramell	1st Lieut.	Paymaster, 6th Inf., 3d Brigade	Sept. 20, 1889
McKelvey, Chas. S.	Captain	Co. F, 9th Inf., 1st Brigade	Jan. 6, 1890
McKelvey, Chas. S.	Major	9th Inf., 1st Brigade	Feb. 8, 1890
McCarty, John	2d Lieut.	Co. A, 10th Inf., 6th Brigade	Feb. 19, 1890
McAmis, Ross	2d Lieut.	Co. A, 8th Inf., 5th Brigade	Apr. 16, 1890
McNear, Fred. W.	Captain	University Cadets	June 25, 1890
McMurray, Perrin K.	2d Lieut.	University Cadets	June 25, 1890
Noble, Chas. A.	Captain	University Cadets	June 26, 1889
O'Neil, Thos. F.	Captain	Co. G, 2d Art., 2d Brigade	Aug. 29, 1888
Owens, Madison T.	Major	Commissary, 1st Brigade	Mar. 14, 1889
Osborne, Henry Z.	Captain	Aid-de-Camp, 1st Brigade	Mar. 15, 1889
Oakley, Edward D.	1st Lieut.	Signal Officer, 2d Art., 2d Brigade	July 5, 1889
Ozias, Chas. W.	2d Lieut.	Co. G, 3d Inf., 2d Brigade	May 21, 1889
O'Brien, Frank R.	Captain	Co. F, 5th Inf., 2d Brigade	July 15, 1889
Owens, Madison T.	Major	Signal Officer, 1st Brigade	Oct. 7, 1889
O'Connor, Jeremiah C.	Lieut.-Col.	3d Inf., 2d Brigade	Jan. 18, 1890
O'Brien, John J.	Major	3d Inf., 2d Brigade	Jan. 18, 1890
O'Brien, Frank R.	Major	5th Inf., 2d Brigade	Apr. 26, 1890
Pressley, Cornelius B.	1st Lieut.	Co. C, 6th Inf., 3d Brigade	Mar. 20, 1889
Potter, S. O. Lewis	Lieut.-Col.	Surgeon, 2d Brigade	June 10, 1889
Pardee, Geo. C.	Captain	Co. A, 5th Inf., 2d Brigade	Aug. 8, 1889
Plant, Albert J.	1st Lieut.	Commissary, 1st Art., 4th Brigade	Nov. 29, 1889
Perkins, Francis B.	Captain	Chaplain, 9th Inf., 1st Brigade	Mar. 5, 1890
Parks, Wm. H.	1st Lieut.	Commissary, 8th Inf., 5th Brigade	May 28, 1890
Parker, Henry G.	Lieut.-Col.	University Cadets	June 25, 1890
Peck, Sam'l S.	2d Lieut.	University Cadets	June 25, 1890
Potts, Fred. S.	1st Lieut.	Commissary, 5th Inf., 2d Brigade	June 30, 1890
Pardee, Geo. C.	Lieut.-Col.	Surgeon, 2d Brigade	Aug. 15, 1890
Roché, H. J.	2d Lieut.	Co. B, 1st Art., 4th Brigade	June 27, 1888
Richardson, Noble A.	1st Lieut.	Co. E, 7th Inf., 1st Brigade	Oct. 29, 1888
Rosenthal, F. Wm., Jr.	Captain	Co. F, 1st Inf., 2d Brigade	Dec. 18, 1888
Russell, Horace M.	Major	Inspector Rifle Practice, 1st Brig.	Mar. 14, 1889
Ragland, Oscar	2d Lieut.	Co. F, 7th Inf., 2d Brigade	May 13, 1889
Robie, Ira A.	1st Lieut.	Signal Officer, 1st Art., 4th Brigade	Sept. 28, 1889
Reynolds, John E.	Captain	Co. E, 8th Inf., 5th Brigade	Dec. 19, 1889
Ruddel, Sam'l J.	Captain	Co. H, 3d Inf., 2d Brigade	Jan. 7, 1890
Rice, Charles T.	1st Lieut.	Commissary, 9th Inf., 1st Brigade	Mar. 5, 1890
Riley, Peter T.	1st Lieut.	Co. H, 3d Inf., 2d Brigade	Feb. 20, 1890
Ruddock, Andrew J.	2d Lieut.	Co. C, 1st Inf., 2d Brigade	Mar. 3, 1890
Richardson, Noble A.	Captain	Co. E, 9th Inf., 1st Brigade	Mar. 10, 1890
Ragland, Oscar	Captain	Co. F, 7th Inf., 1st Brigade	May 19, 1890
Rountree, W. R.	2d Lieut.	Cadet Co., 1st Inf., 2d Brigade	Feb. 28, 1890
Ruscoe, Edwin	1st Lieut.	Q. M., 10th Inf., 6th Brigade	June 23, 1890
Reese, Arthur G.	2d Lieut.	Co. C, 7th Inf., 1st Brigade	July 2, 1890
Russell, Chas. S.	1st Lieut.	Co. A, 2d Art., 2d Brigade	Aug. 1, 1890
Strong, C. B.	1st Lieut.	Co. B, 1st Art., 4th Brigade	June 27, 1888
Schrieber, Wm. G.	Captain	Co. A, 7th Inf., 1st Brigade	Sept. 11, 1888
Snow, Henry E.	Major	Surgeon, 6th Inf., 3d Brigade	Jan. 25, 1889
Scott, Horace V.	1st Lieut.	Commissary, 2d Art., 2d Brigade	Feb. 20, 1889
Stern, Emanuel L.	Major	Ordnance, 1st Brigade	Mar. 14, 1889
Swan, Benj. R.	Colonel	Surgeon, Division	Mar. 20, 1889
Sullivan, Eugene V.	2d Lieut.	Co. A, 1st Inf., 2d Brigade	Mar. 15, 1889
Sutcliffe, Edgar C.	2d Lieut.	Co. G, 1st Inf., 2d Brigade	Mar. 25, 1889
Swain, Cassius B.	Captain	Co. A, 8th Inf., 5th Brigade	Mar. 26, 1889
Scarborough, Jas. G.	Captain	Co. F, 7th Inf., 1st Brigade	May 13, 1889
Steffens, Joseph L.	Lieut.-Col.	University Cadets	June 26, 1889
Sands, John A.	Captain	University Cadets	June 26, 1889

TABLE I—Continued.

NAME.	Rank.	Office and Organization.	Date of Rank.
Sullivan, Thos. B.	1st Lieut.	University Cadets	June 26, 1889
Schutte, John H.	2d Lieut.	University Cadets	June 26, 1889
Sheehan, M. H.	1st Lieut.	Co. G, 1st Art., 4th Brigade	July 1, 1889
Stearns, Albert E.	2d Lieut.	Co. G, 1st Art., 4th Brigade	Aug. 12, 1889
Smith, Albert L.	1st Lieut.	Co. A, 5th Inf., 2d Brigade	Aug. 8, 1889
Sullivan, Wm. M.	Captain	Co. D, 3d Inf., 2d Brigade	Aug. 28, 1889
Spileman, Edward B.	Captain	Co. A, 9th Inf., 1st Brigade	Sept. 7, 1889
Spileman, Edward E.	1st Lieut.	Co. A, 9th Inf., 1st Brigade	Sept. 7, 1889
Smith, Frank G.	2d Lieut.	Co. E, 1st Art., 4th Brigade	Oct. 17, 1889
Shelton, Jas. R.	2d Lieut.	Co. B, 8th Inf., 5th Brigade	Oct. 25, 1889
Sweeny, Jas. R.	1st Lieut.	Co. D, 8th Inf., 5th Brigade	Dec. 19, 1889
Stone, Wm. R.	1st Lieut.	Co. D, 7th Inf., 1st Brigade	Dec. 30, 1889
Stanley, Chas. T.	Major	Ordnance, 2d Brigade	Feb. 7, 1890
Spileman, Edward B.	Colonel	9th Inf., 1st Brigade	Feb. 8, 1890
Schiller, Harry M.	Captain	Co. B, 9th Inf., 1st Brigade	Feb. 14, 1890
Snook, Geo. S.	Major	Inspector, 5th Brigade	Mar. 6, 1890
Spileman, Edward E.	Captain	Co. A, 9th Inf., 1st Brigade	Mar. 13, 1890
Singley, Chas. E.	1st Lieut.	I. R. P., 5th Inf., 2d Brigade	Feb. 24, 1890
Sweeney, Edward D.	Major	Paymaster, 5th Brigade	Apr. 19, 1890
Shackelford, H. B.	Captain	Aid-de-Camp, 5th Brigade	Apr. 19, 1890
Simpson, Wm. M.	2d Lieut.	Co. B, 6th Inf., 3d Brigade	Apr. 17, 1890
Shelton, Jas. R.	1st Lieut.	Co. B, 8th Inf., 5th Brigade	Apr. 16, 1890
Sponogle, F. M.	Major	Surgeon, 6th Inf., 3d Brigade	May 28, 1890
Smith, Frank G.	1st Lieut.	Co. E, 1st Art., 4th Brigade	May 1, 1890
Sprague, Jas. O.	2d Lieut.	Co. E, 1st Art., 4th Brigade	May 1, 1890
Smith, Henry F.	Captain	University Cadets	June 25, 1890
Stearns, Edward H.	Captain	University Cadets	June 25, 1890
Stokes, Guy H.	1st Lieut.	University Cadets	June 25, 1890
Stoney, Donzel	1st Lieut.	University Cadets	June 25, 1890
Smith, Geo. L.	Major	Military Instructor	June 20, 1890
Stone, John T.	2d Lieut.	Co. C, 5th Inf., 2d Brigade	July 28, 1890
Speyer, Fred. M.	2d Lieut.	Co. A, 2d Art., 2d Brigade	Aug. 1, 1890
Thomas, Geo. W.	2d Lieut.	Co. E, 7th Inf., 1st Brigade	Oct. 29, 1889
Thompson, Chas. E.	1st Lieut.	Co. G, 1st Inf., 2d Brigade	Mar. 25, 1889
Twining, Harry L.	1st Lieut.	Co. C, 9th Inf., 1st Brigade	Jan. 3, 1890
Thomas, Geo. P.	1st Lieut.	S. F. Hussars, 2d Brigade	Jan. 15, 1890
Thomas, Geo. W.	1st Lieut.	Co. E, 9th Inf., 1st Brigade	Mar. 10, 1890
Todd, James S.	Captain	Chaplain, 10th Inf., 6th Brigade	June 23, 1890
Tyler, Martin F.	2d Lieut.	Co. A, 1st Art., 4th Brigade	July 15, 1890
Ulm, Nathan A.	2d Lieut.	Co. F, 9th Inf., 1st Brigade	Jan. 6, 1890
Ulm, Nathan A.	1st Lieut.	Co. F, 9th Inf., 1st Brigade	Mar. 17, 1890
Von Adelung, Edward	Captain	University Cadets	Jan. 6, 1889
Van Winkle, L. E.	Captain	Cadet Co., 1st Inf., 2d Brigade	Apr. 1, 1889
Vail, Frank A.	1st Lieut.	Commissary, 2d Art., 2d Brigade	May 10, 1890
Whitmore, R. K.	Captain	Co. D, 6th Inf., 3d Brigade	July 13, 1888
Wood, W. H.	2d Lieut.	Co. D, 6th Inf., 3d Brigade	July 14, 1888
Wheeler, Chas. M.	Major	Judge-Advocate, 6th Brigade	July 7, 1888
Worth, Charles	2d Lieut.	Co. C, 7th Inf., 1st Brigade	July 11, 1888
Woodworth, Benj. R.	Major	Inspector, 3d Brigade	Oct. 2, 1888
White, James A.	Captain	Co. F, 2d Art., 2d Brigade	Sept. 18, 1888
White, Harrison.	Major	Quartermaster, 3d Brigade	Oct. 22, 1888
Williamson, Robt. O.	1st Lieut.	Co. A, 7th Inf., 1st Brigade	Nov. 27, 1888
Warfield, Richard H.	Lieut.-Col.	Aid-de-Camp, Com.-in-Chief	Jan. 8, 1889
Wessling, Wm. H.	2d Lieut.	Co. C, 2d Art., 2d Brigade	Jan. 28, 1889
Wells, G. Wiley	Major	Judge-Advocate, 1st Brigade	Mar. 14, 1889
Wood, Wm. H.	1st Lieut.	Co. D, 6th Inf., 3d Brigade	Mar. 20, 1889
Winchell, Ledyard F.	2d Lieut.	Co. C, 6th Inf., 3d Brigade	Mar. 20, 1889
Ward, J. C.	1st Lieut.	Commissary, 6th Inf., 3d Brigade	Mar. 6, 1889
White, John P.	1st Lieut.	Co. G, 3d Inf., 2d Brigade	May 21, 1889
Ward, James J.	2d Lieut.	Co. G, 2d Art., 2d Brigade	May 27, 1889
Weil, Edwin	1st Lieut.	Cadet Co., 1st Inf., 2d Brigade	Aug. 31, 1889
Willard, Cyrus	Major	Engineer, 1st Brigade	Oct. 12, 1889
Whitton, Albert K.	Major	5th Inf., 2d Brigade	Oct. 26, 1889
Webb, J. C.	Captain	Chaplain, 6th Inf., 3d Brigade	Mar. 1, 1890
Warren, Frank W.	1st Lieut.	Co. F, 3d Inf., 2d Brigade	April 7, 1890
Whitton, Albert K.	Lieut.-Col.	5th Inf., 2d Brigade	April 26, 1890
Welch, William O.	2d Lieut.	Co. D, 9th Inf., 1st Brigade	May 13, 1890
Winter, Wm. H.	1st Lieut.	Q. M., 8th Inf., 5th Brigade	May 28, 1890
White, Richard	1st Lieut.	Sig. Officer, 8th Inf., 5th Brigade	May 28, 1890
Wyman, Wm. H.	1st Lieut.	Com'y, 10th Inf., 6th Brigade	June 23, 1890

TABLE I—Continued.

NAME.	Rank.	Office and Organization.	Date of Rank.
Werthern, Geo. H.	2d Lieut.	Co. F, 5th Inf., 2d Brigade	July 7, 1890
York, Chas. E.	Major	Inspector, 1st Brigade	Oct. 18, 1888
Young, Chas. J.	2d Lieut.	Co. F, 2d Art., 2d Brigade	Dec. 4, 1888
Zamba, Vaclav	1st Lieut.	Ord. Officer, 10th Inf., 6th Brigade	June 26, 1890

TABLE J.

CERTIFICATES OF REELECTION ISSUED FROM JANUARY 1, 1889, TO AUGUST 31, 1890.

NAME.	Rank.	Organization.	When Issued.
Austin, John L.	1st Lieut.	Co. D, 5th Inf., 2d Brigade	Aug. 13, 1889
Beatty, John	1st Lieut.	Co. A, 2d Art., 2d Brigade	Nov. 23, 1889
Burdick, Geo. R.	Captain	Co. B, 1st Inf., 2d Brigade	Nov. 29, 1889
Byrnes, Matthew J.	1st Lieut.	Co. E, 6th Inf., 3d Brigade	Dec. 27, 1889
Byrnes, Edward	Captain	Co. B, 6th Inf., 3d Brigade	May 7, 1890
Bush, H. P.	Captain	Co. H, 1st Inf., 2d Brigade	Aug. 4, 1890
Crichton, John L.	Captain	Co. A, 10th Inf., 6th Brigade	May 7, 1889
Cook, Irving B.	1st Lieut.	Co. B, 1st Inf., 2d Brigade	Dec. 4, 1889
Curson, Wm. H.	Captain	Co. F, 1st Art., 4th Brigade	May 20, 1890
Cooke, John	Captain	Co. B, 1st Art., 4th Brigade	July 25, 1890
Dunbar, John	2d Lieut.	Co. E, 5th Inf., 2d Brigade	Aug. 13, 1889
Foley, Daniel J.	1st Lieut.	Co. A, 10th Inf., 6th Brigade	April 2, 1890
Goodman, Joseph	1st Lieut.	Co. B, 6th Inf., 3d Brigade	May 7, 1890
Glas, Philip J.	Captain	Co. A, 1st Art., 4th Brigade	Aug. 26, 1890
Hudson, H. W.	1st Lieut.	Co. E, 5th Inf., 2d Brigade	July 20, 1889
Johnson, Wm. R.	Captain	Co. A, 6th Inf., 3d Brigade	June 13, 1889
Juillard, Louis W.	Captain	Co. E, 5th Inf., 2d Brigade	July 20, 1889
Levy, Henry	Captain	Co. C, 3d Inf., 2d Brigade	Aug. 20, 1889
Lloyd, A. J.	1st Lieut.	Co. A, 1st Art., 4th Brigade	Aug. 26, 1890
Marshall, R. A.	Captain	Co. A, 1st Inf., 2d Brigade	May 4, 1889
Mitchell, Burr H.	Captain	Co. B, 8th Inf., 5th Brigade	Nov. 23, 1889
Nanscawen, L. V.	Captain	Co. E, 6th Inf., 3d Brigade	Dec. 27, 1889
Nihell, Geo. A.	Captain	Co. C, 1st Art., 4th Brigade	Feb. 12, 1890
Ryan, Martin	1st Lieut.	Co. C, 3d Inf., 2d Brigade	Aug. 20, 1889
Rich, H. W.	2d Lieut.	Co. C, 1st Art., 4th Brigade	Feb. 12, 1890
Seymour, H. I.	Captain	Co. E, 1st Art., 4th Brigade	Nov. 23, 1889
Sime, Hugh T.	Captain	Co. A, 2d Art., 2d Brigade	Nov. 25, 1889
Stewart, Geo. W.	2d Lieut.	Co. E, 6th Inf., 3d Brigade	Dec. 27, 1889
Simonds, P. F.	1st Lieut.	Co. C, 1st Art., 4th Brigade	Feb. 12, 1890
Starin, M. L.	Captain	Co. C, 7th Inf., 1st Brigade	June 9, 1890
Tilden, Chas. L.	Captain	Co. G, 1st Inf., 2d Brigade	Dec. 19, 1889
Warren, Frank W.	2d Lieut.	Co. F, 3d Inf., 2d Brigade	May 4, 1889
Waters, Wm. D.	Captain	Co. H, 2d Art., 2d Brigade	May 4, 1889
Wilkins, Frank	1st Lieut.	Co. B, 8th Inf., 5th Brigade	Nov. 23, 1889
Whitmore, R. K.	Captain	Co. D, 6th Inf., 3d Brigade	July 15, 1890

TABLE K.

COMMISSIONED OFFICERS WHOSE COMMISSIONS HAVE EXPIRED BETWEEN JULY 1, 1888, AND AUGUST 31, 1890.

NAME.	Rank.	Organization.	Term Expired.
Andrews, J. L.	1st Lieut.	Co. A, 6th Inf., 3d Brigade	May 13, 1889
Austin, Frank E.	1st Lieut.	P. M., 6th Inf., 3d Brigade	Sept. 20, 1889
Boyd, J. B.	2d Lieut.	Co. B, 7th Inf., 1st Brigade	July 30, 1888
Blosser, John	Captain	Aid-de-Camp, 1st Brigade	Mar. 14, 1889
Baker, C. M.	Captain	Aid-de-Camp, 1st Brigade	Mar. 14, 1889
Bulson, Herman	Lieut.-Col.	Surgeon, 6th Brigade	April 29, 1889
Burns, Joseph P.	2d Lieut.	Co. B, 1st Art., 4th Brigade	Oct. 30, 1889
Burns, James	2d Lieut.	Co. B, 6th Inf., 3d Brigade	April 17, 1890
Carroll, Edgar B.	1st Lieut.	Co. B, 1st Art., 4th Brigade	June 27, 1888
Chapman, A. B.	1st Lieut.	Co. A, 7th Inf., 1st Brigade	Nov. 27, 1888
Casey, Edward J.	2d Lieut.	Co. F, 2d Art., 2d Brigade	Dec. 4, 1888
Cunningham, W. E.	1st Lieut.	Co. H, 2d Art., 2d Brigade	Jan. 9, 1889
Cottle, John E.	Captain	Chaplain, 3d Inf., 2d Brigade	June 29, 1889
Colwell, Geo. E.	Major	Commissary, 3d Brigade	May 31, 1890
Dillon, Chas. E.	1st Lieut.	Co. C, 5th Inf., 2d Brigade	July 28, 1890
Estudillo, J. E.	Major	Quartermaster, 1st Brigade	Mar. 14, 1889
Foster, M. A.	Major	Insp'r Rifle Practice, 1st Brigade	Mar. 14, 1889
Gard, Geo. E.	Major	Paymaster, 1st Brigade	Mar. 14, 1889
Hamilton, Geo. B.	2d Lieut.	Co. B, 8th Inf., 5th Brigade	Oct. 25, 1889
Humphries, H. B.	2d Lieut.	Co. A, 1st Art., 4th Brigade	July 15, 1890
Ingalsbe, Alva W.	2d Lieut.	Co. B, 5th Inf., 2d Brigade	Dec. 26, 1889
Jones, R. M.	Captain	Co. A, 8th Inf., 5th Brigade	Mar. 26, 1889
Kinney, Abbot	Major	Insp'r Rifle Practice, 1st Brigade	July 5, 1888
Kurtz, Joseph	Lieut.-Col.	Surgeon, 1st Brigade	Mar. 14, 1889
Loughery, R. J.	Captain	Co. F, 1st Inf., 2d Brigade	Dec. 18, 1888
Longley, Geo. W.	1st Lieut.	Co. F, 1st Inf., 2d Brigade	Mar. 6, 1890
Lee, John G.	1st Lieut.	Co. F, 1st Art., 4th Brigade	April 26, 1890
McCarthy, P. F.	1st Lieut.	Co. E, 2d Art., 2d Brigade	Aug. 14, 1888
Nerney, Thos. A.	Captain	Co. B, 9th Inf., 1st Brigade	Feb. 14, 1890
Patton, H. W.	Major	Ordnance, 1st Brigade	Mar. 14, 1889
Pratt, Wm. P.	2d Lieut.	Co. A, 10th Inf., 6th Brigade	Feb. 19, 1890
Quinn, Peter J.	1st Lieut.	Co. G, 3d Inf., 2d Brigade	May 21, 1889
Reinfeld, James W.	Captain	Co. G, 2d Art., 2d Brigade	Aug. 29, 1888
Rice, Geo. A.	1st Lieut.	Co. A, 1st Inf., 2d Brigade	Mar. 15, 1889
Roche, H. J.	2d Lieut.	Co. B, 1st Art., 4th Brigade	June 25, 1890
Seaton, W. H.	1st Lieut.	Co. F, 5th Inf., 2d Brigade	Nov. 5, 1888
Sumner, Wm.	1st Lieut.	Co. G, 1st Inf., 2d Brigade	Mar. 25, 1889
Sumers, Frank A.	2d Lieut.	Cadet Co., 1st Inf., 2d Brigade	Apr. 1, 1889
Steltz, John T.	2d Lieut.	Co. D, 2d Art., 2d Brigade	Jan. 29, 1890
Singley, Chas. E.	2d Lieut.	Co. C, 5th Inf., 2d Brigade	Apr. 7, 1890
Vogelsang, E. D.	2d Lieut.	Co. A, 6th Inf., 3d Brigade	May 13, 1889
Wulburn, Diedrich	1st Lieut.	Co. C, 2d Art., 2d Brigade	Dec. 17, 1888
Williams, W. T.	Major	Judge-Advocate, 1st Brigade	Mar. 14, 1889
Williams, L. P.	2d Lieut.	Co. G, 2d Art., 2d Brigade	May 27, 1889
York, Chas. E.	Major	Inspector, 1st Brigade	Mar. 14, 1889
Zeising, Frank M.	1st Lieut.	Co. D, 1st Inf., 2d Brigade	Nov. 6, 1889

OFFICERS REMOVED BETWEEN JULY 1, 1888, AND AUGUST 31, 1890.

NAME.	Rank.	Office and Organization.	Date of Rank.
Cutter, Chester G.	Major	Ordnance, 2d Brigade	Feb. 7, 1890
Snow, H. E.	Major	Surgeon, 6th Inf., 3d Brigade	May 28, 1890
Wilsey, Wm. J.	Lieut.-Col.	Aid-de-Camp, Com'dr-in-Chief	Sept. 4, 1889

APPOINTMENT WITHDRAWN.

NAME.	Rank.	Office and Organization.	Date of Rank.
Boyce, H. H.	Brig.-Gen.	Commanding 1st Brigade	Mar. 7, 1889

MUSTERED OUT.

NAME.	Rank.	Office and Organization.	Date of Rank.
Russell, W. H. H.	Colonel	Seventh Inf., 1st Brigade	Aug. 1, 1890

TABLE L.

LIST OF RESIGNATIONS, COMMENCING JULY 1, 1888, AND ENDING AUGUST 31, 1890.

NAME.	Rank.	Organization.	Date of Acceptance.	S.O. No.
Alvord, C. T.	Major	Paymaster, 5th Brig.	Feb. 7, 1890	1
Austin, John L.	Captain	Co. D, 5th Inf., 2d Brig.	Aug. 4, 1890	36
Brown, Albert L.	1st Lieut.	Co. E, 7th Inf., 1st Brig.	Aug. 7, 1888	37
Baldwin, Fred. A.	2d Lieut.	Co. B, 1st Inf., 2d Brig.	Oct. 5, 1888	46
Biles, Alfred F.	Major	Inspector, 1st Brig.	Oct. 2, 1888	45
Brott, Walter E.	Captain	Co. D, 7th Inf., 1st Brig.	Oct. 16, 1888	48
Bainbridge, C. E.	1st Lieut.	Co. D, 6th Inf., 3d Brig.	Feb. 27, 1889	10
Bulson, Herman R.	Lieut.-Col.	Surgeon, 6th Brig.	May 7, 1889	16
Brown, J. A.	1st Lieut.	Cadet Co., 1st Inf., 2d Brig.	Aug. 31, 1889	37
Bryant, S. C.	2d Lieut.	Co. A, 9th Inf., 1st Brig.	Feb. 28, 1890	3
Berry, Joseph	1st Lieut.	Co. A, 2d Art., 2d Brig.	Apr. 14, 1890	11
Beatty, John	1st Lieut.	Co. A, 2d Art., 2d Brig.	July 21, 1890	31
Coleman, C. C.	Lieut.-Col.	5th Inf., 2d Brig.	Aug. 31, 1889	37
Carr, Byron O.	Lieut.-Col.	Engineer, Division	May 23, 1890	19
Colmery, W. W.	2d Lieut.	Co. F, 7th Inf., 1st Brig.	July 7, 1890	28
Cutting, Eugene L.	Captain	Cadet Co., 1st Inf., 2d Brig.	Aug. 11, 1890	37
Duncan, James M.	2d Lieut.	Co. H, 1st Inf., 2d Brig.	May 7, 1889	16
Eshbach, Frank	1st Lieut.	Insp. R. P., 6th Inf., 3d Brig.	Oct. 24, 1889	47
Eby, Thomas M.	2d Lieut.	Co. D, 8th Inf., 5th Brig.	June 13, 1890	24
Eckley, Henry W.	Major	Military Instructor	June 20, 1890	25
Ferguson, A. D.	2d Lieut.	Co. F, 6th Inf., 3d Brig.	Feb. 13, 1889	8
Faulkers, Geo. H.	2d Lieut.	Cadet Co., 1st Inf., 2d Brig.	Oct. 8, 1889	43
Flynn, John H.	Captain	Co. E, 2d Art., 2d Brig.	Feb. 4, 1890	2
Foster, C. F.	Major	Commissary, 5th Brig.	Mar. 17, 1890	5
Fairbanks, Rola D.	1st Lieut.	Co. G, 2d Art., 2d Brig.	May 7, 1890	15
Gilchrist, J. D.	1st Lieut.	Insp. R. P., 7th Inf., 1st Brig.	July 7, 1888	34
Gibson, James A.	Major	Engineer, 1st Brig.	July 19, 1889	30
Gade, Henry C.	1st Lieut.	Co. G, 7th Inf., 1st Brig.	Nov. 11, 1889	51
Green, A. M.	Captain	Adj't., 7th Inf., 1st Brig.	July 8, 1890	29
Howard, H. S.	Captain	Cadet Co., 2d Art., 2d Brig.	Dec. 15, 1888	53
Hosmer, H. B.	2d Lieut.	Co. F, 1st Inf., 2d Brig.	Mar. 26, 1889	12
Hughes, James E.	Major	Engineer, 3d Brig.	July 25, 1889	32
Hahn, A. J.	1st Lieut.	Q. M., 6th Inf., 3d Brig.	Oct. 1, 1889	41
Kohler, Hans H.	Lieut.-Col.	I. R. P., Division	July 12, 1890	30
Loring, Prescott	Captain	Co. F, 2d Art., 2d Brig.	Aug. 20, 1888	39
Littlefield, M. W.	2d Lieut.	Co. E, 7th Inf., 1st Brig.	Sept. 19, 1888	43
Lauck, Joseph B.	Captain	Co. A, 5th Inf., 2d Brig.	June 5, 1889	19
Logan, W. E.	1st Lieut.	Co. C, 7th Inf., 1st Brig.	Feb. 7, 1890	1
Little, Robert	1st Lieut.	Co. E, 1st Art., 4th Brig.	Apr. 14, 1890	11
Matthews, W. H. J.	1st Lieut.	Ord. Officer, 5th Inf., 2d Brig.	Oct. 10, 1888	47
Montgomery, Wm.	1st Lieut.	Com'y, 2d Art., 2d Brig.	Feb. 18, 1889	9
Madden, John F.	1st Lieut.	Cadet Co., 1st Inf., 2d Brig.	Apr. 18, 1889	15
Meade, O. J.	1st Lieut.	Ord. Officer, 6th Inf., 3d Brig.	June 10, 1889	20
Mott, William A.	2d Lieut.	Co. G, 1st Art., 4th Brig.	July 11, 1889	29
Mack, James E.	1st Lieut.	Q. M., 7th Inf., 1st Brig.	Mar. 19, 1890	6
Meagher, Thomas F.	1st Lieut.	Com'y, 5th Inf., 2d Brig.	June 30, 1890	27
McAllister, W. F.	Lieut.-Col.	Surgeon, 2d Brig.	June 10, 1889	20
McAlpin, A. C.	Captain	Co. D, 3d Inf., 2d Brig.	June 20, 1889	24
McPherson, James W.	2d Lieut.	Co. A, 7th Inf., 1st Brig.	Aug. 11, 1890	37
Neary, Fred.	Major	1st Art., 4th Brig.	July 11, 1889	29
O'Reilly, James J.	Captain	Co. D, 5th Inf., 2d Brig.	Aug. 20, 1889	36
Oakley, Edward D.	1st Lieut.	Sig. Officer, 2d Art., 2d Brig.	May 15, 1890	16
Potter, S. O. Lewis	Lieut.-Col.	Surgeon, 2d Brig.	June 7, 1890	23
Reynolds, Robert W.	1st Lieut.	S. F. Hussars, 2d Brig.	July 25, 1889	32
Rivett, Harry W.	1st Lieut.	Q. M., 1st Art., 4th Brig.	Nov. 22, 1889	53
Rosenthal, F. W., Jr.	Captain	Co. F, 1st Inf., 2d Brig.	Aug. 11, 1890	37
Stewart, Philip	1st Lieut.	Co. C, 6th Inf., 3d Brig.	Feb. 8, 1889	6

TABLE L—Continued.

NAME.	Rank.	Organization.	Date of Acceptance.	S.O. No.
Smedberg, Wm. R., Jr.	Captain.....	Cadet Co., 1st Inf., 2d Brig.	Apr. 1, 1889.	13
Sheehan, Edward C.	1st Lieut.	Co. G, 1st Art., 4th Brig.	June 14, 1889.	22
Schultz, Philip	Captain.....	Co. D, 2d Art., 2d Brig.	Oct. 23, 1889.	46
Stoney, Joseph A.	2d Lieut.	Co. C, 1st Inf., 2d Brig.	Dec. 27, 1889.	55
Scott, Horace V.	1st Lieut.	Com'y, 2d Art., 2d Brig.	Feb. 18, 1890.	2
Scarborough, Jas. G.	Captain.....	Co. F, 7th Inf., 1st Brig.	Apr. 16, 1890.	12
Swett, Frank H.	Captain.....	Adj't., 5th Inf., 2d Brig.	May 2, 1890.	14
Swan, Benjamin R.	Colonel.....	Surgeon, Division	May 23, 1890.	19
Van Winkle, L. E.	Captain.....	Cadet Co., 1st Inf., 2d Brig.	Aug. 31, 1889.	37
Vischer, Arthur	Captain.....	Aid-de-Camp, 3d Brig.	Nov. 11, 1889.	51
Warren, Frank J.	1st Lieut.	Sig. Corps, 1st Inf., 2d Brig.	Oct. 16, 1888.	48
Wiseman, John H.	Captain.....	Cadet Co., 1st Art., 4th Brig.	Dec. 15, 1888.	53
Wigginton, P. D.	Lieut.-Col.	A. D. C. to Com.-in-Chief	Jan. 8, 1889.	1
Woodson, Frank M.	2d Lieut.	Cadet Co., 1st Art., 4th Brig.	Jan. 17, 1889.	4
Williams, A. C.	1st Lieut.	Co. F, 6th Inf., 3d Brig.	July 20, 1889.	31
Wiseman, Thomas T.	Captain.....	Adj't., 1st Art., 4th Brig.	Oct. 21, 1889.	48
Winans, Lewis J.	Captain.....	Co. C, 5th Inf., 2d Brig.	Dec. 27, 1889.	55
Wilkins, Frank	1st Lieut.	Co. B, 8th Inf., 5th Brig.	Mar. 17, 1890.	5
Worth, Charles	2d Lieut.	Co. C, 7th Inf., 1st Brig.	June 3, 1890.	21
Ward, J. J.	2d Lieut.	Co. G, 2d Art., 2d Brig.	June 30, 1890.	27
Young, Charles J.	2d Lieut.	Co. F, 2d Art., 2d Brig.	Apr. 26, 1890.	13

TABLE M.

DECEASED OFFICERS AND ENLISTED MEN OF THE NATIONAL GUARD FROM JULY 1, 1888,
TO AUGUST 31, 1890.

NAME.	Rank.	Organization.	Date of Death.
Bateman, M. C.	Lieut.-Col.	Retired; 2d Brigade	June 12, 1890
Butler, W. S.	Sergeant	Co. A, 3d Inf., 2d Brigade	May 2, 1890
Clark, Z. P.	Colonel	Assist. Adj't.-Gen., Division	Aug. 31, 1890
Dunnington, J. W.	Private	Co. C, 5th Inf., 2d Brigade	Sept. 4, 1889
Doody, Daniel	Private	Co. A, 1st Inf., 2d Brigade	Jan. 4, 1890
Donahue, Jas. M.	Colonel	5th Inf., 2d Brigade	Mar. 31, 1890
Fish, E. N.	Private	Co. A, 5th Inf., 2d Brigade	July 17, 1888
Farr, A. E.	Private	Co. G, 1st Art., 4th Brigade	Aug. 13, 1888
Gitchell, D. F.	Private	Co. C, 1st Art., 4th Brigade	July 21, 1888
Hyde, A. Y.	Private	Co. E, 6th Inf., 3d Brigade	July 20, 1888
Hackett, S. B.	Private	Co. B, 3d Inf., 2d Brigade	Mar. 7, 1889
Holmes, Walter H.	Major	Retired; 2d Brigade	Mar. 26, 1889
Hill, Ray P.	Private	Co. C, 5th Inf., 2d Brigade	Apr. 4, 1889
Horton, L. H.	2d Lieut.	Cadet Co., 1st Inf., 2d Brigade	Feb. 6, 1890
Harlow, Richmond	Private	Co. B, 1st Art., 4th Brigade	May 29, 1890
Kane, Francis B.	Major	Surgeon, 3d Inf., 2d Brigade	Dec. 29, 1888
Kennedy, Wm. J.	Private	Co. D, 5th Inf., 2d Brigade	Sept. 26, 1889
Lynch, David J.	Private	Co. G, 3d Inf., 2d Brigade	Oct. 11, 1888
Mills, Samuel	Private	Co. H., 2d Art., 2d Brigade	Feb. 24, 1889
Murphy, M. T.	1st Sergeant	Co. D, 3d Inf., 2d Brigade	Apr. 22, 1889
Morton, E. G.	Private	Co. B, 8th Inf., 5th Brigade	May 2, 1889
Mathen, Jules	Musician	2d Art., 2d Brigade	July 23, 1889
McNeil, Frank	Private	Co. F, 1st Art., 4th Brigade	Oct. 20, 1889
McGrath, Lawrence	Sergeant	Co. A, 3d Inf., 2d Brigade	Feb. 25, 1890
Mintonye, Alois	Private	Co. H, 2d Art., 2d Brigade	Mar. 6, 1890
McLeod, Malcolm	Private	Co. C, 1st Art., 4th Brigade	..... 1890
Meadow, Joseph S.	Private	Co. A, 6th Inf., 3d Brigade	Dec. 13, 1889
Nev. Chas. K.	Private	Co. D, 2d Art., 2d Brigade	Mar. 19, 1889
O'Rourke, D. V.	Private	Co. C, 3d Inf., 2d Brigade	Mar. 8, 1889
Parker, William T.	Private	Co. E, 1st Art., 4th Brigade	Mar. 21, 1889
Peterson, Adolph J.	Sergeant	Hosp. Stew'd, 1st Inf., 2d Brigade	June 18, 1890
Robinson, Frank	Private	Co. A, 3d Inf., 2d Brigade	Oct. 1, 1889
Ryan, Pearce H.	Major	Retired; 5th Brigade	Nov. 5, 1889
Richmond, H. C.	Private	Co. B, 1st Art., 4th Brigade	May 29, 1890
Smith, Fred. E.	Private	Co. D, 7th Inf., 1st Brigade	July 6, 1888
Stalman, H. P.	Private	Co. G, 3d Inf., 2d Brigade	Mar. 15, 1889

TABLE M—Continued.

NAME.	Rank.	Office and Organization.	Date of Death.
Stokes, Richard	Private	Co. A, 3d Inf., 2d Brigade.....	Nov. 9, 1888
Stangroom, Chas. M.	Captain	Retired; 2d Brigade	Mar. 5, 1890
Smith, Fred. G.	Major	Retired; 2d Brigade	Jan. —, 1889
Sabin, Robert	Colonel	3d Inf., 2d Brigade	Aug. 3, 1890
Teller, George	Captain	Co. F, 1st Inf., retired, 2d Brigade.....	....., 1890
Thompson, Philip	Private	Co. E, 8th Inf., 5th Brigade	July 26, 1890
Woods, Jean	Private	Co. D, 1st Inf., 2d Brigade	Aug. 13, 1888

TABLE N.

LIST OF PARDONS GRANTED TO MEMBERS OF THE NATIONAL GUARD WHO WERE DIS-HONORABLY DISCHARGED.

NAME AND RANK.	Organization.	Offense.	Date of Pardon.	No. of Order.
Priv. James W. O'Donnell.....	Co. F, 3d Inf.	Neglect of duty.....	Oct. 2, 1888.....	S. O. No. 45
Corp. Fred'k A. Griffing.....	Co. A, 5th Inf.	Neglect of duty.....	Aug. 20, 1889.....	S. O. No. 36
Chief Mus'n Isaac Coggin.....	2d Art.	Inciting mutiny.....	Sept. 6, 1889.....	G. O. No. 18
Chief Mus'n H. C. Kropp.....	3d Inf.	Inciting mutiny.....	Sept. 6, 1889.....	G. O. No. 18
Priv. Harry B. Stewart.....	Co. B, 7th Inf.	Neglect of duty.....	Feb. 7, 1890.....	S. O. No. 1
Priv. Lewis A. Taylor.....	Co. A, 1st Inf.	Neglect of duty.....	June 20, 1890.....	S. O. No. 25
Priv. David Cuttin	Co. A, 10th Inf.	Non-attendance at drills.....	June 30, 1890.....	S. O. No. 27
Priv. Henry M. Hoxe	Co. F, 2d Art.	Neglect of duty.....	Aug. 11, 1890.....	S. O. No. 37

TABLE O.

LIST OF EXEMPT CERTIFICATES ISSUED TO THE MEMBERS OF THE NATIONAL GUARD OF CALIFORNIA, FROM JULY 1, 1888, TO SEPTEMBER 1, 1890.

NAME.	Rank.	Organization.	When Issued.
Anderson, J. D.	Sergeant	S. F. Hussars, 2d Brigade.....	Jan. 5, 1889
Andrews, Jas. L.	1st Lieut.	Co. A, 6th Inf., 3d Brigade.....	Jan. 16, 1889
Atkins, Robert S.	Corporal	Co. F, 2d Art., 2d Brigade.....	Feb. 8, 1889
Allen, Ed. D.	Corporal	Co. A, 8th Inf., 5th Brigade.....	April 3, 1889
Ashman, W. D.	Private	Co. C, 1st Art., 4th Brigade.....	May 16, 1889
Adams, Z. B.	Private	Co. G, 1st Inf., 2d Brigade	June 17, 1889
Adams, John F.	Private	Co. G, 1st Inf., 2d Brigade	June 17, 1889
Atkinson, H. L.	Private	Co. A, 10th Inf., 6th Brigade.....	Mar. 11, 1889
Allen, John H.	Sergeant	Co. A, 8th Inf., 5th Brigade.....	July 15, 1890
Batchelder, H. L.	Sergeant	Non-Com. Staff, 2d Art., 2d Brig.....	Aug. 2, 1888
Burk, W. J.	Sergeant	Co. F, 1st Inf., 2d Brigade.....	Aug. 20, 1888
Burke, M. J.	Captain	Co. A, 1st Art., 4th Brigade.....	Aug. 20, 1888
Boutz, Leon	Private	Co. H, 2d Art., 2d Brigade.....	Sept. 17, 1888
Byrne, Thos. H.	Sergeant	Co. H, 2d Art., 2d Brigade.....	Nov. 16, 1888
Baker, F. M.	Private	Co. A, 6th Inf., 3d Brigade.....	Jan. 16, 1889
Baker, J. H.	Private	Co. A, 6th Inf., 3d Brigade.....	Jan. 16, 1889
Baker, Henry	Private	Co. A, 6th Inf., 3d Brigade.....	Jan. 16, 1889
Baker, H. C. W.	Private	Co. A, 6th Inf., 3d Brigade.....	Jan. 16, 1889
Brush, Geo. A.	Private	Co. C, 1st Inf., 2d Brigade.....	Jan. 17, 1889
Bloeser, John	Captain	Aid-de-Camp, 1st Brigade.....	Jan. 26, 1889
Breman, James E.	Private	Co. A, 1st Inf., 2d Brigade.....	Jan. 26, 1889
Boyd, John B.	Private	Co. B, 7th Inf., 1st Brigade.....	Mar. 14, 1889
Brialich, Fred.	Corporal	S. F. Hussars, 2d Brigade.....	April 9, 1889
Byrne, John	Private	Co. D, 1st Inf., 2d Brigade.....	May 7, 1889
Bernard, Wm. J.	Private	Co. B, 3d Inf., 2d Brigade.....	May 30, 1889
Bailey, Nathaniel	Private	Co. C, 1st Art., 4th Brigade.....	June 24, 1889
Brooks, Harry	Private	Co. C, 2d Art., 2d Brigade.....	July 30, 1889
Bryan, Thomas	Private	Co. C, 1st Inf., 2d Brigade.....	July 30, 1889

TABLE O—Continued.

NAME.	Rank.	Office and Organization.	When Issued.
Bennett, Charles H.	Private	Co. F, 1st Inf., 2d Brigade	Aug. 27, 1889
Boardman, Samuel H.	Private	Co. B, 1st Inf., 2d Brigade	Aug. 27, 1889
Bree, John	Musician	Band, 2d Art., 2d Brigade	Jan. 10, 1890
Blake, John	Private	Co. C, 3d Inf., 2d Brigade	Feb. 6, 1890
Brown, Ed. F.	Private	Co. B, 9th Inf., 1st Brigade	Feb. 13, 1890
Burke, Thomas W.	Private	Co. E, 2d Art., 2d Brigade	Feb. 13, 1890
Buckbee, O. S.	Sergeant	Co. B, 1st Inf., 2d Brigade	April 26, 1890
Ball, N. A.	1st Sergeant	Co. A, 5th Inf., 2d Brigade	June 30, 1890
Connor, Wm. E.	Sergeant	N. C. Staff, 1st Inf., 2d Brigade	Sept. 27, 1888
Cook, Irving B.	1st Lieut.	Co. B, 1st Inf., 2d Brigade	Oct. 5, 1888
Chapman, A. B.	1st Lieut.	Co. A, 7th Inf., 1st Brigade	Oct. 25, 1888
Cronin, William J.	Corporal	Co. H, 2d Art., 2d Brigade	Nov. 16, 1888
Cills, Arthur W.	Private	Co. B, 1st Inf., 2d Brigade	Feb. 12, 1889
Cutting, John T.	Brig.-Gen.	Commanding 2d Brigade	Mar. 14, 1889
Camper, C. W.	Corporal	Co. A, 8th Inf., 5th Brigade	April 3, 1889
Canfield, E. E.	Sergeant	Co. A, 8th Inf., 5th Brigade	April 3, 1889
Carr, Thomas K.	Private	Co. A, 10th Inf., 6th Brigade	May 15, 1889
Chope, Thomas H.	Sergeant	Co. A, 10th Inf., 6th Brigade	May 15, 1889
Cline, Thomas F.	Sergeant	Co. B, 3d Inf., 2d Brigade	June 12, 1889
Campbell, Charles P.	Private	Co. G, 1st Inf., 2d Brigade	June 17, 1889
Campbell, George A.	Private	Co. C, 1st Inf., 2d Brigade	June 17, 1889
Chepchase, J. M.	Private	Co. C, 1st Inf., 2d Brigade	Sept. 18, 1889
Campbell, James T.	Private	Co. C, 1st Inf., 2d Brigade	Oct. 24, 1889
Coggin, Isaac C.	Chief Musician	Band, 2d Art., 2d Brigade	Jan. 10, 1890
Crowley, Daniel	2d Lieut.	Co. C, 3d Inf., 2d Brigade	June 16, 1890
Dickinson, John H.	Colonel	1st Inf., 2d Brigade	Sept. 5, 1888
Dimond, W. H.	Maj.-Gen.	Division	Nov. 12, 1888
De Land, Henry	Corporal	Co. H, 1st Inf., 2d Brigade	Dec. 29, 1888
Dean, Joseph W.	Private	Co. C, 1st Art., 4th Brigade	Jan. 5, 1889
Doland, John W.	Private	Co. G, 1st Inf., 4th Brigade	Jan. 15, 1889
Dannals, George M.	Major	Commissary, 1st Brigade	Mar. 14, 1889
Dalton, John P.	Captain	Retired	Mar. 21, 1889
Dunn, S. P.	Sergeant	Co. A, 8th Inf., 5th Brigade	April 3, 1889
Deveney, John	Private	Co. A, 8th Inf., 5th Brigade	April 3, 1889
Doane, Geo. A.	Private	Co. G, 1st Inf., 2d Brigade	June 17, 1889
Detrick, Edington, Jr.	Private	Co. B, 1st Inf., 2d Brigade	Aug. 13, 1889
Dunn, Chas. A.	Private	Co. C, 1st Inf., 2d Brigade	Nov. 11, 1889
Davis, Wm. A.	Brig.-Gen.	Late Commander 3d Brigade	Dec. 3, 1889
D'Arcy, Charles	Sergeant	Battery A, 2d Art., 2d Brigade	Mar. 11, 1890
Dickinson, Robert B.	Private	Co. A, 10th Inf., 6th Brigade	April 26, 1890
Diers, Peter M.	Private	Co. G, 1st Inf., 2d Brigade	April 26, 1890
Denny, Chas. A.	Sergeant	Co. A, 2d Art., 2d Brigade	April 26, 1890
Dodge, John M.	Private	Co. B, 9th Inf., 1st Brigade	June 26, 1890
Despau, John T.	Private	Co. C, 2d Art., 2d Brigade	July 24, 1890
English, Wm. P.	Sergeant	Co. G, 1st Inf., 2d Brigade	June 17, 1889
Everding, Edward	Private	Co. A, 10th Inf., 6th Brigade	June 29, 1889
Ellis, John S.	Brig.-Gen.	Late Commander 2d Brigade	Oct. 5, 1889
Ellwell, Aug. H.	Sergeant-Maj.	Division	Feb. 28, 1890
Fredericks, George	Private	Co. F, 1st Inf., 2d Brigade	Aug. 20, 1888
Fisher, C. C.	1st Lieut.	Ord. Officer, 2d Art., 2d Brigade	Sept. 19, 1888
Ford, John F.	Sergeant	Co. D, 1st Inf., 2d Brigade	Jan. 29, 1889
Filgate, Henry P.	Captain	Co. B, 3d Inf., 2d Brigade	Feb. 20, 1889
Foster, Charles H.	Private	Co. C, 2d Art., 2d Brigade	Mar. 14, 1889
Flynn, John H.	Captain	Co. E, 2d Art., 2d Brigade	Nov. 20, 1889
Fanjoy, Wm. H.	Private	Co. D, 1st Inf., 2d Brigade	Mar. 27, 1889
Fountain, Frank	Sergeant	Co. E, 3d Inf., 2d Brigade	June 16, 1890
Fitzpatrick, James	Corporal	Co. E, 3d Inf., 2d Brigade	June 16, 1890
Fairbanks, D. B.	Colonel	5th Inf., 2d Brigade	June 30, 1890
Foley, Daniel	Captain	Co. A, 3d Inf., 2d Brigade	July 17, 1890
Gochman, W. H.	Sergeant	N. C. Staff, 7th Inf., 1st Brigade	Aug. 2, 1888
Green, A. M.	Captain	Adj., 7th Inf., 1st Brigade	Aug. 2, 1888
Gibson, W. M.	Major	A. A. C., 3d Brigade	May 21, 1888
Grant, E. A.	Corporal	Co. C, 1st Inf., 2d Brigade	Oct. 30, 1888
Gitchell, D. B.	Sergeant	Co. C, 1st Art., 4th Brigade	Dec. 14, 1888
Grimes, John	Private	Co. C, 1st Art., 4th Brigade	Dec. 14, 1888
Gardner, Michael	Private	Co. C, 2d Art., 2d Brigade	Jan. 26, 1889
Gault, Alexander	Private	Co. C, 1st Art., 4th Brigade	Feb. 13, 1889
Grant, John	Private	Mont. Guard, 3d Inf., 2d Brigade	Mar. 14, 1889
Goodwin, Frank J.*	Corporal	Co. F, 1st Inf., 2d Brigade	Sept. 29, 1887

* Omitted in report of 1887-88.

TABLE O—Continued.

NAME.	Rank.	Office and Organization.	When Issued.
Greene, Harry A.	Private	Co. B, 1st Inf., 2d Brigade	April 16, 1890
Grete, Edward C.	Private	Co. H, 2d Art., 2d Brigade	May 7, 1890
Goetjen, Ed. L.	Corporal	Co. B, 1st Inf., 2d Brigade	May 7, 1890
Horn, Henry F.	1st Sergeant	Co. H, 2d Art., 2d Brigade	July 5, 1888
Hosmer, H. B.	2d Lieut.	Co. F, 1st Inf., 2d Brigade	Aug. 20, 1888
Huber, Herman	1st Sergeant	Co. C, 2d Art., 2d Brigade	Nov. 16, 1888
Howell, W. E.	Sergeant	Co. C, 1st Art., 4th Brigade	Dec. 14, 1888
Hartley, A. G.	Private	Co. B, 7th Inf., 1st Brigade	Dec. 28, 1888
Hogan, William J.	Sergeant	Co. A, 1st Art., 4th Brigade	June 14, 1889
Hagan, Charles A.	1st Lieut.	Co. B, 5th Inf., 2d Brigade	June 24, 1889
Hansell, George H.	Private	Co. C, 1st Inf., 2d Brigade	Oct. 24, 1889
Hardy, Johnson G.	Sergeant	Co. E, 3d Inf., 2d Brigade	June 16, 1890
Ingalsbe, Alva W.	2d Lieut.	Co. B, 5th Inf., 2d Brigade	June 24, 1889
Jessup, J. E.	Private	Co. A, 2d Art., 2d Brigade	July 17, 1888
Jones, E. C.	Corporal	Co. F, 1st Inf., 2d Brigade	Aug. 20, 1888
Johnson, W. R.	Captain	Co. A, 6th Inf., 3d Brigade	Jan. 16, 1889
Kinne, Frank A.	Sergeant	1st Inf., 2d Brigade	Sept. 5, 1888
Knight, Allen	1st Lieut.	Co. A, 2d Art., 2d Brigade	Oct. 10, 1888
Kohler, H. H.	Lieut.-Col.	I. R. P. Division	Nov. 12, 1888
Kewen, Perrie	Colonel	Assist. Adjt.-Gen., California	Feb. 13, 1889
Knowlton, L. W.	Sergt.-Major	1st Inf., 2d Brigade	Mar. 19, 1889
Knorp, Albert	Private	Co. G, 1st Inf., 2d Brigade	June 17, 1889
Keeffe, Thomas J.	Private	Co. B, 1st Inf., 2d Brigade	Oct. 21, 1889
Kenney, James E.	Private	Co. C, 1st Inf., 2d Brigade	Oct. 24, 1889
Kuhls, Frederick A.	1st Lieut.	I. R. P., 2d Art., 2d Brigade	Nov. 13, 1889
Kelly, John F.	Private	Co. C, 1st Inf., 2d Brigade	May 7, 1890
Kidd, Adam J.	Sergeant	Co. E, 3d Inf., 2d Brigade	May 17, 1890
Kinne, C. Mason	Colonel	Retired	June 26, 1890
Leo, John H.	1st Lieut.	Co. H, 2d Art., 2d Brigade	July 2, 1888
Livingston, John A.	Private	Co. A, 10th Inf., 6th Brigade	July 5, 1888
Longley, Geo. W.	1st Lieut.	Co. F, 1st Inf., 2d Brigade	Aug. 20, 1888
Loughery, Robert J.	Captain	Co. F, 1st Inf., 2d Brigade	Aug. 20, 1888
Lippman, F. W.	Private	Co. F, 1st Inf., 2d Brigade	Aug. 20, 1888
Larkin, Thomas	Captain	Chaplain, 3d Inf., 2d Brigade	Dec. 14, 1888
Ludeman, John H.	2d Lieut.	Co. D, 2d Art., 2d Brigade	May 7, 1889
Lewis, Edward B.	1st Sergeant	Co. B, 5th Inf., 2d Brigade	June 24, 1889
Loryea, Milton I.	Sergeant	Co. B, 5th Inf., 2d Brigade	June 24, 1889
Latham, Arthur S.	Private	Co. A, 5th Inf., 2d Brigade	Sept. 27, 1889
De la Fountain, Victor	Musician	Band, 2d Art., 2d Brigade	Jan. 10, 1890
Lando, Philip	Sergeant	Co. H, 2d Art., 2d Brigade	May 7, 1890
Lichfield, Joseph M.	Lieut.-Col.	Retired	July 12, 1890
Lewis, E. W.	Private	Co. C, 1st Inf., 2d Brigade	Sept. 1, 1890
Marshall, R. A.	Captain	Co. A, 1st Inf., 2d Brigade	Sept. 5, 1888
Margo, J. A.	Sergeant	N. C. Staff, 1st Inf., 2d Brigade	Sept. 17, 1888
Merrill, Chas. A.	Private	Co. A, 6th Inf., 3d Brigade	Jan. 16, 1889
Mason, John	Major	Commissary, 2d Brigade	Mar. 8, 1889
Mason, A. G.	Private	Co. A, 8th Inf., 5th Brigade	April 3, 1889
Marwedel, George F.*	Sergeant	Co. C, 1st Inf., 2d Brigade	Mar. 27, 1865
Morgan, David E.	Private	Co. C, 1st Art., 4th Brigade	June 14, 1889
Mangels, Henry J.	1st Lieut.	Co. C, 2d Art., 2d Brigade	June 20, 1889
Mitchell, E. J.	Private	Co. D, 5th Inf., 2d Brigade	July 30, 1889
Murphy, Patrick	Private	Co. C, 3d Inf., 2d Brigade	April 16, 1890
Miller, John	1st Lieut.	I. R. P., 1st Art., 4th Brigade	June 3, 1890
Mooser, Chas. E.	Private	Co. F, 2d Art., 2d Brigade	July 17, 1890
McLennan, Frank P.	Major	Quartermaster, 2d Brigade	Aug. 7, 1888
McCauslan, Harry	Private	Co. H, 2d Art., 2d Brigade	Jan. 15, 1889
McCluskey, James	Private	Co. C, 1st Inf., 2d Brigade	Oct. 24, 1889
McCann, James H.	Sergeant	Co. C, 3d Inf., 2d Brigade	June 16, 1890
McBrien, Patrick	Sergeant	Co. C, 3d Inf., 2d Brigade	June 16, 1890
McDowell, A. E.	Sergeant	Co. F, 2d Art., 2d Brigade	July 17, 1890
McKee, H. L.	Private	Co. C, 7th Inf., 1st Brigade	Sept. 1, 1890
Nichelson, L. W.	Corporal	Co. C, 1st Art., 4th Brigade	July 2, 1889
Nolte, Otto	Private	Co. C, 1st Inf., 2d Brigade	Nov. 16, 1889
Nichols, Frank	Private	Co. G, 2d Inf., 2d Brigade	Mar. 21, 1890
Otto, Antone F.	Private	Co. F, 1st Inf., 2d Brigade	Aug. 20, 1888
O'Connor, Jas. J.	Sergeant	Co. A, 1st Inf., 2d Brigade	Sept. 5, 1888
O'Neill, Joseph	Private	Co. C, 3d Inf., 2d Brigade	Sept. 17, 1888

* Duplicate.

TABLE O—Continued.

NAME.	Rank.	Office and Organization.	When Issued.
O'Grady, Frank	Captain	Co. D, 5th Inf., 2d Brigade	Jan. 17, 1890
Overshiner, L. P.	Private	Co. B, 9th Inf., 1st Brigade	Feb. 21, 1890
Otto, Joseph A.	Private	Co. A, 10 Inf., 6th Brigade	June 13, 1890
O'Connor, J. C.	Lieut.-Col.	3d Inf., 2d Brigade	July 21, 1890
Pendleton, H. L.	Corporal	Co. F, 1st Inf., 2d Brigade	Aug. 20, 1888
Peterson, Walter A.	Private	Co. C, 1st Inf., 2d Brigade	May 15, 1889
Peterson, Adolph J.	Sergeant	N. C. Staff, 1st Inf., 2d Brigade	June 8, 1889
Pratt, William P.	2d Lieut.	Co. A, 10th Inf., 6th Brigade	Mar. 11, 1890
Palmer, Isaac L.	Private	Co. B, 9th Inf., 1st Brigade	June 3, 1890
Plotts, Thomas M.	1st Lieut.	Ord. Officer, 7th Inf., 1st Brigade	July 28, 1890
Rigades, Emanuel	Private	Co. D, 1st Inf., 2d Brigade	Oct. 5, 1888
Russell, W. H. H.	Colonel	Commanding 7th Inf., 1st Brigade	Oct. 25, 1888
Rich, Henry W.	2d Lieut.	Co. C, 1st Art., 4th Brigade	Dec. 14, 1888
Regan, John R.	Sergeant	Co. B, 3d Inf., 2d Brigade	May 7, 1889
Ruscoe, Edwin	Sergeant	Co. A, 10th Inf., 6th Brigade	May 15, 1889
Raye, Alfred P.	Private	Co. C, 1st Inf., 2d Brigade	Sept. 18, 1889
Rice, Geo. A.	Private	Co. A, 1st Inf., 2d Brigade	Sept. 18, 1889
Ralph, James D.	Private	Co. C, 2d Art., 2d Brigade	April 2, 1890
Rittinger, Peter J.	Private	Co. C, 2d Art., 2d Brigade	June 30, 1890
Roche, Henry J.	2d Lieut.	Co. B, 1st Art., 4th Brigade	July 12, 1890
Seaman, Samuel	Sergeant	Co. H, 2d Art., 2d Brigade	July 5, 1888
Stevens, Frank	Sergeant	Co. F, 1st Inf., 2d Brigade	Aug. 20, 1888
Sullivan, Wm. P.	Major	1st Inf., 2d Brigade	Sept. 5, 1888
Sime, Hugh T.	Captain	Co. A, 2d Art., 2d Brigade	Sept. 17, 1888
Saulsbury, E. J.	Sergeant	Co. A, 2d Art., 2d Brigade	Sept. 27, 1888
Sierp, Fred. W.	Sergeant	Co. D, 1st Inf., 2d Brigade	Oct. 5, 1888
Schiller, Harry M.	1st Lieut.	Co. B, 9th Inf., 1st Brigade	Oct. 30, 1888
Simonds, P. F.	1st Lieut.	Co. C, 1st Art., 4th Brigade	Nov. 15, 1888
Stecher, Fred. J.	Sergeant	Co. H, 1st Inf., 2d Brigade	Dec. 29, 1888
Schlam, Caesar	Private	Co. A, 1st Inf., 2d Brigade	Jan. 26, 1889
Sawyer, Wm. T.	Corporal	Co. B, 1st Inf., 2d Brigade	Feb. 12, 1889
Schath, John J.	Corporal	Co. D, 2d Art., 2d Brigade	Mar. 14, 1889
Swearingen, C. H.	Corporal	Co. A, 8th Inf., 5th Brigade	April 3, 1889
Sneeth, Frederick	Corporal	Co. D, 2d Art., 2d Brigade	May 7, 1889
Starin, M. L.	Captain	Co. C, 7th Inf., 1st Brigade	May 15, 1889
Sparrowe, Chas. G.	Sergeant	Co. G, 1st Inf., 2d Brigade	June 17, 1889
Swain, C. B.	Captain	Co. A, 8th Inf., 5th Brigade	Oct. 30, 1889
Seekamp, Geo.	Musician	Second Art., 2d Brigade	Jan. 10, 1890
Stoney, Joseph A.	2d Lieut.	Co. C, 1st Inf., 2d Brigade	Jan. 10, 1890
Schultz, Philip	Captain	Co. D, 2d Art., 2d Brigade	Mar. 11, 1890
Siebe, John F.	Sergeant	Co. C, 2d Art., 2d Brigade	Mar. 21, 1890
Steiger, Chas. D.	Sergeant	N. C. Staff, 2d Art., 2d Brigade	April 16, 1890
Samuels, Jacob	Sergeant	Co. C, 3d Inf., 2d Brigade	June 16, 1890
Taylor, Samuel J.	Lieut.-Col.	First Inf., 2d Brigade	Sept. 5, 1888
Turner, Robert D.	Private	Co. A, 1st Inf., 2d Brigade	Sept. 5, 1888
Toomey, Ed. W.	Private	Co. G, 3d Inf., 2d Brigade	Jan. 5, 1889
True, Benj. F.	Sergeant	Co. A, 8th Inf., 5th Brigade	Nov. 1, 1889
Thompson, R. W.*	Lieutenant	Summer Guard, 2d Brigade	Jan. —, 1869
Van Zandt, J. M.	1st Lieut.	Staff, 7th Inf., 1st Brigade	June 12, 1889
Wood, Samuel M.	Major	Inspector, 3d Brigade	July 16, 1888
Winzler, Alfred C.	Private	Co. A, 10th Inf., 6th Brigade	Dec. 18, 1888
Wuthrick, John	Private	Co. D, 2d Art., 2d Brigade	Mar. 14, 1889
Wilson, Geo. T.	Private	Co. A, 8th Inf., 5th Brigade	April 3, 1889
Wedgwood, Frank L.	Private	Co. A, 5th Inf., 2d Brigade	April 9, 1889
Whitlock, A. D.	Prin. Musician	Fifth Inf., 2d Brigade	April 9, 1889
Welch, Henry S.	Major	Surgeon, 1st Art., 4th Brigade	May 17, 1889
Wickenhauser, Ed.	Corporal	Co. A, 2d Art., 2d Brigade	Aug. 20, 1889
Waltham, Charles F.	Private	Co. C, 1st Inf., 2d Brigade	Aug. 30, 1889
Wilkins, M. H.	Corporal	Co. A, 1st Inf., 2d Brigade	Sept. 18, 1889
Winans, L. J.	Captain	Co. C, 5th Inf., 2d Brigade	Nov. 15, 1889
Whittle, James T.	Private	Co. B, 7th Inf., 1st Brigade	Nov. 23, 1889
Wilson, David	Private	Co. A, 10th Inf., 6th Brigade	Jan. 11, 1890
White, Douglast	Corporal	Columbian Guard	Feb. 19, 1890
Waters, Thomas	Sergeant	Co. E, 3d Inf., 2d Brigade	June 16, 1890
Whitton, A. K.	Lieut.-Col.	5th Inf., 2d Brigade	June 30, 1890
West, Fred. C.	Sergeant	Co. C, 5th Inf., 2d Brigade	Aug. 15, 1890
Young, Conrad	Private	Co. C, 2d Art., 2d Brigade	May 7, 1889
Yager, George L.	Sergeant	Co. C, 3d Inf., 2d Brigade	June 16, 1890
Zeising, Frank	1st Lieut.	Co. D, 1st Inf., 2d Brigade	Sept. 18, 1889

* Duplicate.

† Alias Bosby.

TABLE P.

TESTIMONIALS ISSUED TO CALIFORNIA VOLUNTEERS, FROM JULY 1, 1888, TO AUGUST 31, 1890.

NAME.	Rank.	Organization.	When Issued.
Brown, J. B.	Sergeant	Co. H, 2d Infantry	Dec. 20, 1888
Bell, George	Private	Co. F, 2d Cavalry	Feb. 14, 1890
Couger, Charles E.	1st Lieut.	Co. K, 8th Infantry	Dec. 21, 1888
Ellert, John A.	Private	Co. B, 1st Mountaineers	Mar. 5, 1889
Eiser, Louis	Private	Co. K, 1st Infantry	Mar. 3, 1890
Green, Alfred S.	Private	Co. A, 6th Infantry	Feb. 19, 1890
Knowlton, Joseph, Jr.	Sergeant	Co. A, 8th Infantry	Dec. 8, 1889
Logan, Samuel	Corporal	Co. E, 5th Infantry	Oct. 20, 1888
Snyder, S. L.	Private	Co. H, 1st Cavalry	July 25, 1889
Taylor, George W.	Corporal	Co. A, 4th Infantry	Nov. 9, 1888
Turner, James T.	Private	Co. I, 4th Infantry	May 12, 1890
Weber, Louis	Private	Co. F, 5th Infantry	June 6, 1889

TABLE Q.

CERTIFICATES OF SERVICE ISSUED TO CALIFORNIA VOLUNTEERS, FROM JULY 1, 1888, TO AUGUST 31, 1890.

NAME.	Rank.	Organization.	When Issued.
Anthony, H. K.	Sergeant	Co. C, 2d Cavalry	Aug. 17, 1888
Armstrong, John	Private	Co. A, 4th Infantry	Sept. 15, 1888
Aikens, N. M.	Private	Co. F, 5th Infantry	Nov. 24, 1888
Albares, Michael	Private	Co. B, Native Cavalry	May 17, 1889
Abrams, Francis	Private	Co. B, 4th Infantry	Sept. 10, 1889
Allen, William L.	Private	Co. K, 2d Infantry	Sept. 27, 1889
Alyed, Joseph	Private	Co. C, 7th Infantry	Oct. 22, 1889
Alyed, Joseph	Private	Co. C, 1st Infantry	Oct. 22, 1889
Anderson, Nickelson	Private	Co. F, 2d Infantry	Nov. 22, 1889
Astill, Richard	Private	Co. D, 1st Vet. Infantry	Dec. 30, 1889
Appleby, William	Private	Co. E, 4th Infantry	May 17, 1890
Allison, James	Private	Co. A, 2d Infantry	Aug. 27, 1890
Brown, Thomas	Private	Co. K, 2d Cavalry	July 24, 1888
Beatty, Samuel H.	Private	Co. E, 1st Cavalry	July 27, 1888
Boyle, Anthony	Private	Co. I, 8th Infantry	Aug. 20, 1888
Bryant, Arthur B.	Private	Co. E, 8th Infantry	Aug. 23, 1888
Billian, Francis	Private	Co. B, 1st Cavalry	Oct. 7, 1888
Brown, W. H.	Private	Co. I, 4th Infantry	Dec. 9, 1888
Burke, George	Private	Co. F, 8th Infantry	Dec. 6, 1888
Bungan, John	Private	Co. I, 2d Infantry	Jan. 23, 1889
Box, James R.	Private	Co. I, 2d Cavalry	Feb. 8, 1889
Beach, Wm. L.	Private	Co. K, 2d Cavalry	Mar. 5, 1889
Barry, James	Private	Co. B, 1st Cavalry	Mar. 18, 1889
Bennett, C. E.	Lieut.-Col.	1st Cavalry	April 11, 1889
Beebe, Aaron M.	Private	Co. I, 6th Infantry	June 20, 1889
Bassegnano, Victor	Private	Co. E, 2d Infantry	April 19, 1889
Bird, Wm. B.	Private	Co. C, 2d Cavalry	May 23, 1889
Baldes, Joaquin	Private	Co. A, Native Cavalry	June 4, 1889
Buckingham, D. W.	Private	Co. C, 2d Infantry	May 14, 1889
Brett, Thomas	Corporal	Co. B, 4th Infantry	June 9, 1889
Briggs, Lawrence	Private	Co. E, 1st Infantry	May 22, 1889
Brewster, Albert	Corporal	Co. B, 6th Infantry	June 8, 1889
Belser, Frank J.	Private	Co. E, 5th Infantry	May 29, 1889
Belser, Frank J.	Private	Co. E, 1st Vet. Infantry	May 7, 1889
Blank, Gottlieb	Saddler	Co. M, 2d Cavalry	July 27, 1889
Burns, John C.	Private	Co. F, 2d Cavalry	July 20, 1889
Berry, John J.	Private	Co. K, 1st Infantry	Aug. 16, 1889
Brown, O. M.	Colonel	1st Cavalry	Sept. 26, 1889
Brown, William	Private	Co. C, 1st Cavalry	Sept. 3, 1889
Beatty, Ezra W.	Private	Co. G, 7th Infantry	Oct. 8, 1889
Brown, William	Private	Co. H, 1st Infantry	Sept. 3, 1889
Brown, Charles	Sergeant	Co. K, 5th Infantry	Dec. 18, 1889
Byrnes, Michael J.	Sergeant	Co. C, 1st Mountaineers	Dec. 16, 1889

TABLE Q—Continued.

NAME.	Rank.	Organization.	When Issued.
Bell, George	Private	Co. F, 2d Cavalry	Feb. 14, 1890
Berry, Michael	Private	Co. B, 6th Infantry	Feb. 27, 1890
Bassett, Thomas	Private	Co. A, 1st Cavalry	Feb. 28, 1890
Bowen, Thomas	Private	Co. G, 6th Infantry	Mar. 24, 1890
Bullen, William	Private	Co. C, 1st Cavalry	April 29, 1890
Battles, Anthony	Private	Co. D, 1st Infantry	June 3, 1890
Barnes, Geo. W.	Corporal	Co. G, 6th Infantry	April 28, 1890
Bennett, William	Sergeant	Co. A, 3d Infantry	April 29, 1890
Bauer, John	Private	Co. F, 1st Cavalry	April 14, 1890
Bywaters, Joseph	Private	Co. B, 1st Mountaineers	Mar. 21, 1890
Burkhardt, Geo.	Private	Co. E, 5th Infantry	Mar. 24, 1890
Brown, David	Private	Co. K, 7th Infantry	June 18, 1890
Borman, Henry	Private	Co. H, 2d Infantry	June 18, 1890
Birch, William	Private	Co. F, 4th Infantry	Aug. 20, 1890
Bryant, Richard	Private	Co. A, 4th Infantry	July 18, 1890
Bird, William B.	Private	Cos. C and E, 2d Cavalry	Aug. 13, 1890
Benedict, George	Private	Co. G, 6th Infantry	July 12, 1890
Bradley, Thomas	Private	Cos. H and M, 2d Cavalry	July 25, 1890
Beebe, Aaron M.	Private	Co. I, 6th Infantry	June 25, 1890
Burnett, Garret	Private	Co. D, 4th Infantry	July 12, 1890
Bush, Charles	Private	Co. A, 8th Infantry	Aug. 20, 1890
Bowen, G. C.	Sergeant	Hospital Steward, 2d Infantry	Aug. 18, 1890
Brown, John	Private	Co. B, 1st Cavalry	July 28, 1890
Buchanan, Allen	Private	Co. D, 1st Infantry	July 23, 1890
Bradley, Michael	Private	Co. I, 2d Infantry	July 22, 1890
Brauson, M. C.	Private	Co. H, 8th Infantry	July 23, 1890
Clefford, John	Sergeant	Co. H, 4th Infantry	July 25, 1888
Cobb, John L.	Private	Co. A, 7th Infantry	July 27, 1888
Connelly, Patrick	Private	Co. C, 1st Veteran Infantry	Aug. 30, 1888
Cummings, Michael	Private	Cos. H and B, 1st Infantry	Jan. 4, 1889
Campbell, Irving	Corporal	Co. A, 7th Infantry	Nov. 10, 1888
Carson, George	Private	Co. E, 1st Infantry	Nov. 19, 1888
Cohle, John	Private	Co. B, 5th Infantry	Oct. 17, 1888
Combs, James	Private	Cos. C and A, 3d Infantry	Dec. 10, 1888
Cornelius, Patrick	Private	Co. E, 2d Infantry	Feb. 27, 1889
Calhoun, J. E.	Sergeant	Co. B, 1st Cavalry	Mar. 12, 1889
Cutting, H. E.	Private	Co. H, 5th Infantry	Feb. 27, 1889
Croll, Ed. L.	Private	Co. G, 5th Infantry	Feb. 28, 1889
Castleton, H. L.	Sergeant	Co. B, 2d Cavalry	Jan. 15, 1889
Connolly, Cornelius	Musician	Co. G, 6th Infantry	Jan. 16, 1889
Clark, John P.	Private	Co. E, 1st Mountaineers	Mar. 22, 1889
Coberly, Enoch	Private	Co. H, 3d Infantry	June 4, 1889
Cawgill, Latham	Corporal	Co. M, 2d Cavalry	May 21, 1889
Crow, George	Sergeant	Cos. A and C, 1st Cavalry	June 15, 1889
Conover, Addison V. D.	Private	Cos. E and A, 1st Infantry	April 9, 1889
Conwell, James	2d Lieut.	Co. B, 5th Infantry	May 25, 1889
Carrillo, José	Sergeant	Co. C, 1st Native Cavalry	June 4, 1889
Case, John A.	Corporal	Co. I, 4th Infantry	July 13, 1889
Cañeda, José	Private	Co. D, 1st Native Cavalry	Sept. 18, 1889
Calvert, Joseph R.	Trumpeter	Co. M, 1st Cavalry	Oct. 8, 1889
Cook, Charles	Private	Co. C, 4th Infantry	Oct. 21, 1889
Clark, James	Private	Co. K, 4th Infantry	Oct. 21, 1889
Calderwood, N. H.	Private	Co. D, 7th Infantry	Sept. 9, 1889
Connor, Thomas	Private	Co. D, 2d Infantry	Jan. 18, 1890
Connor, Ed. P.	Colonel	3d Infantry	Dec. 19, 1889
Chapman, Henry H.	Private	Co. F, 8th Infantry	Feb. 6, 1890
Chandler, Wm. G.	Private	Co. L, 1st Cavalry	Mar. 20, 1890
Carroll, William	Private	Co. A, 2d Infantry	Mar. 4, 1890
Crow, George	Sergeant	Co. C, 1st Cavalry	April 2, 1890
Carroll, E. B.	Private	Co. B, 3d Infantry	May 26, 1890
Cook, Eli	Captain	Co. G, 6th Infantry	May 9, 1890
Corrigan, William	Private	Co. G, 4th Infantry	May 21, 1890
Caupeld, Francis M.	Private	Co. K, 1st Infantry	June 6, 1890
Cordero, José de J.	Private	Co. C, 1st Native Cavalry	June 28, 1890
Casey, William T.	Private	Co. I, 5th Infantry	July 24, 1890
Coppleman, J. W.	Private	Co. F, 1st Infantry	July 31, 1890
Carr, William D.	Private	Co. I, 2d Infantry	Aug. 13, 1890
Chandler, W. A.	Private	Co. H, 2d Cavalry	Aug. 27, 1890
Chestophil, Charles	Sergeant	Co. E, 1st Cavalry	Aug. 27, 1890
Dana, John P.	Private	Co. E, 1st Infantry	July 27, 1888

TABLE Q—Continued.

NAME.	Rank.	Organization.	When Issued.
Diemer, Philip	Private	Co. B, 1st Cavalry	Feb. 4, 1889
Davis, Robert	Private	Co. A, 3d Infantry	Dec. 15, 1888
Dreynan, Robert	Private	Co. D, 7th Infantry	Mar. 29, 1889
DePrate, Ernest	Private	Co. E, 1st Cavalry	Mar. 22, 1889
Doan, Wallace	Corporal	Co. E, 5th Infantry	June 17, 1889
Davidson, James	1st Lieut.	Co. C, 4th Infantry	April 23, 1889
Delmore, James	Sergeant	Co. I, 1st Cavalry	May 28, 1889
Dodge, C. R.	Private	Co. H, 2d Infantry	May 30, 1889
Dutton, George R.	Private	Co. B, 4th Infantry	July 19, 1889
Dougherty, Hugh	Private	Co. E, 6th Infantry	Aug. 12, 1889
Dill, Otway	Private	Co. D, 2d Infantry	Aug. 29, 1889
Dolores, Elezalde	Private	Co. D, 1st Native Cavalry	Oct. 1, 1889
De la Guerra, W. M.	Captain	Co. C, 1st Native Cavalry	Oct. 1, 1889
Davidson, George	Private	Co. K, 5th Infantry	Nov. 22, 1889
Dunn, James W.	Private	Co. B, 8th Infantry	Jan. 22, 1890
Dutton, James R.	Private	Co. D, 1st Cavalry	Dec. 18, 1889
Dutton, James R.	Private	Co. C, 1st Cavalry	Dec. 18, 1889
Dinstein, Wm.	Private	Co. C, 1st Cavalry	June 13, 1890
Dudley, Chas. P.	Sergeant	Q. M., 7th Infantry	April 17, 1890
Dwyer, James	Private	Co. G, 1st Cavalry	June 20, 1890
Dillon, Thomas	Private	Co. A, 1st Cavalry	June 26, 1890
Davison, M. C.	Private	Co. G, 7th Infantry	July 30, 1890
Davis, Wm. J.	Private	Co. A, 1st Cavalry	July 18, 1890
Duffy, M. M.	Private	Co. H, 2d Cavalry	Aug. 13, 1890
Dowley, R. P.	Private	Co. D, 3d Infantry	Aug. 27, 1890
Dodge, Leonard	Private	Co. E, 1st Mountaineers	Aug. 31, 1890
Egbert, Chris. H.	Private	Co. K, 1st Cavalry	July 25, 1888
Evans, Edward	Corporal	Co. C, 7th Infantry	Oct. 20, 1888
Evans, George S.	Colonel	2d Cavalry	Feb. 28, 1889
Eschenberg, John R.	Private	Co. I, 2d Infantry	May 24, 1889
Elliott, S. F.	Surgeon	4th Infantry	July 15, 1889
Egloff, John P.	Farrier	Co. L, 1st Cavalry	Feb. 27, 1890
Emery, Leander	Private	Co. E, 1st Cavalry	Jan. 13, 1890
Eiser, Louis	Private	Co. K, 1st Infantry	Mar. 3, 1890
Ellis, Edward H.	1st Lieut.	Q. M., 2d Cavalry	May 13, 1890
Everett, Charles	Private	Co. B, 1st Veteran Infantry	April 29, 1890
Eldred, Wm. H.	Musician	3d Infantry	June 20, 1890
Eidel, Marten	Private	Co. C, 6th Infantry	July 22, 1890
Francois, Gemie	Private	Co. B, 1st Native Cavalry	July 13, 1888
Forbes, Eli B.	Saddler	Cos. A and C, 1st Cavalry	July 16, 1888
Ford, Louis	Private	Co. A, 3d Infantry	Aug. 2, 1888
Frink, E. B.	Captain	Co. A, 5th Infantry	Oct. 16, 1888
Faulkner, Joseph J.	Private	Co. I, 4th Infantry	Oct. 22, 1888
Fitzgerald, James	Private	Cos. B and G, 1st Infantry	Mar. 29, 1889
Fay, John P.	Private	Co. E, 2d Cavalry	July 2, 1889
Fauk, Victor	Private	Co. H, 2d Cavalry	July 10, 1889
Farney, Henry	Private	Co. C, 8th Infantry	July 7, 1889
Finnerty, John B.	Private	Co. H, 2d Infantry	Aug. 2, 1889
Frazier, Abner	Private	Co. D, 1st Cavalry	Aug. 29, 1889
Forehand, J. H.	Private	Cos. B and K, 3d Infantry	Aug. 30, 1889
Fowler, W. H.	Private	Co. G, 5th Infantry	Dec. 16, 1889
Finley, John W.	Private	Co. D, 1st Infantry	Feb. 5, 1890
Filch, Jesse I.	Captain	Co. B, 4th Infantry	June 6, 1890
Fogg, Henry N.	Private	Co. F, 1st Infantry	Aug. 2, 1890
Fonger, Edward	Private	Co. A, 2d Cavalry	Aug. 11, 1890
Forrest, Wm. H.	Private	Co. E, 4th Infantry	Aug. 11, 1890
Frazier, Abner	Private	Co. D, 1st Infantry	Aug. 18, 1890
Fitzgerald, James C.	Sergeant	Co. C, 3d Infantry	Aug. 31, 1890
Graham, Robert	Private	Co. E, 6th Infantry	July 11, 1888
Griffin, John J.	Private	Co. K, 2d Cavalry	Aug. 7, 1888
Gillman, Charles R.	Private	Co. D, 3d Infantry	Oct. 18, 1888
Green, Jerry K.	Private	Co. G, 5th Infantry	Nov. 9, 1888
Greswold, Chas. W.	Sergeant	Co. E, 2d Infantry	Dec. 13, 1888
Gaudy, Washington	Private	Co. K, 7th Infantry	Feb. 7, 1889
Graham, James J.	Corporal	Cos. E and H, 3d Infantry	Mar. 3, 1889
Gancy, Thomas	Private	Co. G, 5th Infantry	June 11, 1889
Greggs, Joseph	Corporal	Co. I, 6th Infantry	Sept. 18, 1889
Gilbert, J. W.	Private	Co. H, 8th Infantry	Sept. 26, 1889
Gautrat, Charles	Private	Co. D, 2d Infantry	Oct. 9, 1889
Grive, John	Private	Co. B, 8th Infantry	Dec. 16, 1889

TABLE Q—Continued.

NAME.	Rank.	Organization.	When Issued.
Grimshaw, George	Corporal	Co. D, 2d Cavalry	Mar. 14, 1890
Green, Alfred S.	Private	Co. A, 6th Infantry	Feb. 19, 1890
Gardner, James	Private	Co. K, 5th Infantry	May 13, 1890
Garrett, W. H. H.	Private	Co. E, 1st Infantry	May 21, 1890
Grant, W. T.	Private	Co. C, 3d Infantry	July 18, 1890
Goodale, Fred. W.	Private	Co. H, 4th Infantry	July 30, 1890
Hyler, Charles	Private	Co. B, 4th Infantry	July 6, 1888
Healy, George P.	Private	Co. E, 1st Cavalry	Aug. 10, 1888
Hubbard, Charles G.	Captain	Cos. K and G, 2d and 8th Infantry.	Oct. 8, 1888
Hale, Edward O.	Private	Co. E, 1st Infantry	Oct. 16, 1888
Hosmer, Josiah	Captain	Co. E, 3d Infantry	Oct. 16, 1888
Horn, William	Private	Co. H, 1st Infantry	Oct. 16, 1888
Harbough, W. A.	Musician	Co. I, 1st Cavalry	Oct. 29, 1888
Horn, Peter P.	Private	Co. E, 1st Infantry	Nov. 24, 1888
Hull, Wm. E.	Captain	Co. D, 2d Infantry	Jan. 28, 1889
Hughes, Wm.	Sergeant	Co. D, 1st Mountaineers	Feb. 5, 1889
Haggins, John	Private	Co. I, 5th Infantry	Feb. 27, 1889
Heggins, John	Private	Co. B, 2d Cavalry	Mar. 5, 1889
Howard, John	Private	Co. D, 4th Infantry	June 24, 1889
Hutchinson, Geo. R.	Private	Co. F, 2d Cavalry	May 3, 1889
Hill, Edwin M.	Private	Co. E, 2d Cavalry	April 23, 1889
Harkins, G. W.	Private	Co. D, 2d Infantry	April 15, 1889
Hill, John J.	Private	Co. B, 5th Infantry	June 7, 1889
Hyde, Charles H.	Private	Co. B, 1st Cavalry	April 25, 1889
Hyde, Charles H.	Private	Co. G, 1st Infantry	April 25, 1889
Howard, John	Private	Co. D, 4th Infantry	July 14, 1889
Harrison, John	Private	Co. A, 6th Infantry	Aug. 30, 1889
Hale, D. H.	Saddler	Co. H, 2d Cavalry	Aug. 30, 1889
Harden, Henry	Private	Co. I, 2d Infantry	Sept. 18, 1889
Heald, W. H.	Private	Co. K, 7th Infantry	Sept. 26, 1889
Heck, Victor, Sr.	Sergeant	Co. I, 6th Infantry	Sept. 18, 1889
Hermann, Peter	Private	Co. F, 4th Infantry	Nov. 4, 1889
Horton, Wm.	Private	Co. H, 2d Infantry	Feb. 24, 1890
Hurgot, Frederick	Sergeant	Co. G, 1st Cavalry	Nov. 15, 1889
Hoyt, Samuel N.	Captain	Co. K, 3d Infantry	Dec. 19, 1889
Herring, Thomas	Private	Co. F, 4th Infantry	Oct. 24, 1889
Harris, Geo. W.	Private	Co. G, 4th Infantry	Feb. 7, 1890
Huntington, G. C.	Sergeant	Co. G, 2d Cavalry	Mar. 4, 1890
Hernance, Peter	Private	Co. E, 8th Infantry	Nov. 4, 1889
Hall, Robert K.	Private	Co. E, 1st Cavalry	Jan. 13, 1890
Henry, Wm.	Saddler	Co. M, 1st Cavalry	Jan. 13, 1890
Higgins, John	Private	Co. I, 5th Infantry	Dec. 21, 1889
Hammond, Wm.	Private	Co. K, 3d Infantry	Mar. 27, 1890
Hummelke, Chas.	Private	Co. K, 1st Cavalry	May 24, 1890
Hurst, John	Private	Co. F, 1st Infantry	May 24, 1890
Hopp, John J.	Private	Co. F, 4th Infantry	May 21, 1890
Hackett, Chas. W.	Private	Co. G, 7th Infantry	May 31, 1890
Hoden, Porter	1st Lieut.	Co. C, 1st Cavalry	June 28, 1890
Holzerper, H. C.	Private	Co. G, 1st Cavalry	July 2, 1890
Handley, John	Private	Co. C, 8th Infantry	July 18, 1890
Henry, Wm.	Sergt.-Major	5th Infantry	July 17, 1890
Holmes, Ralph	Private	Co. K, 6th Infantry	July 30, 1890
Howard, Frank E.	Private	Co. H, 2d Infantry	Aug. 2, 1890
Hill, Josiah L.	Private	Co. E, 1st Veteran Infantry	Aug. 11, 1890
Hollis, Benj. F.	Private	Co. K, Seventh Infantry	Sept. 3, 1890
Hanly, M. W.	Private	Co. I, 2d Cavalry	Sept. 3, 1890
Icanberry, Jacob M.	Private	Co. F, 4th Infantry	Dec. 13, 1889
Johnson, James	Private	Co. A, 4th Infantry	Oct. 2, 1888
Jarrett, W. R.	Private	Co. C, 8th Infantry	Mar. 19, 1889
Jimeno, P.	Captain	Co. C, 1st Native Cavalry	April 3, 1889
Johnson, John	Private	Co. E, 6th Infantry	May 23, 1889
Jenkins, George	Private	Co. A, 2d Infantry	June 27, 1889
Johnson, Eli	Private	Co. G, 1st Cavalry	Aug. 12, 1889
Jones, William	Private	Co. F, 7th Infantry	Oct. 19, 1889
Jones, William	Private	Co. K, 4th Infantry	Oct. 19, 1889
Jones, Ozeas E.	Private	Co. K, 2d Cavalry	Nov. 30, 1889
Jordan, Geo. M.	Corporal	Co. A, 5th Infantry	June 16, 1890
Jefts, E. G.	Private	Co. G, 4th Infantry	May 3, 1890
Jenkins, Ed. S.	Corporal	Co. K, 7th Infantry	Aug. 11, 1890
Jewett, Chas. W.	Private	Co. H, 4th Infantry	Aug. 16, 1890

TABLE Q—Continued.

NAME.	Rank.	Organization.	When Issued.
King, George S.	Private	Co. E, 7th Infantry	Aug. 13, 1888
Kelly, H. W.	Sergeant	—, 2d Cavalry	June 16, 1889
Kenna, Joseph M.	Private	Co. M, 8th Infantry	Nov. 9, 1888
Kearney, Matthew	Sergeant	Co. A, 2d Cavalry	Dec. 11, 1888
Kenna, Joseph M.	Private	Co. F, 8th Infantry	Dec. 13, 1888
Kuster, Barney	Private	Co. A, 1st Infantry	Feb. 26, 1889
Knudzen, Chas.	Private	Co. I, 8th Infantry	Mar. 12, 1889
Keefer, John L.	Private	Co. G, 2d Cavalry	June 17, 1889
Keep, R. W.	Private	Co. D, 8th Infantry	April 25, 1889
Kelly, James	Private	Co. G, 1st Cavalry	April 10, 1889
Kerr, John	Private	Co. A, 2d Infantry	Aug. 15, 1889
Kerby, Andrew	Private	Co. C, 2d Infantry	Oct. 11, 1889
Kelley, William	Private	Co. E, 1st Cavalry	Feb. 7, 1890
Kilfayle, Frank	Corporal	Co. H, 2d Cavalry	Mar. 15, 1890
Klaus, Moses	Private	Co. B, 2d Infantry	Dec. 16, 1889
Kalmbach, Fred'k	Private	Co. G, 2d Infantry	April 29, 1890
Kundzen, Chas.	Private	Co. I, 8th Infantry	May 17, 1890
Kustel, C. B.	Private	Co. D, 8th Infantry	June 18, 1890
Kirk, Francis M.	Corporal	Co. A, 4th Infantry	June 23, 1890
Kendall, Wm.	Private	Co. D, 6th Infantry	Aug. 16, 1890
Kellen, Geo. E.	Private	Co. F, 1st Infantry	Aug. 18, 1890
Kelly, Thos. H.	Sergeant	Co. I, 1st Cavalry	Aug. 27, 1890
Lawson, G. W.	Private	Co. D, 2d Cavalry	July 25, 1888
Lindell, Robert	Private	Co. C, 2d Cavalry	July 9, 1888
Lane, John W.	Private	Co. D, 1st Infantry	Dec. 4, 1888
Lehay, Wm.	Private	Co. D, 5th Infantry	Mar. 14, 1889
Lydon, Peter	Private	Co. F, 8th Infantry	July 18, 1889
Ling, Robert	Private	Co. F, 1st Cavalry	Feb. 8, 1890
Lawrence, John	Private	Co. C, 3d Infantry	Dec. 28, 1889
Libby, Stephen N.	Private	Co. F, 5th Infantry	June 18, 1890
Logan, John	Private	Co. C, 2d Cavalry	July 12, 1890
Lossee, Wm.	Private	Co. A, 4th Infantry	July 18, 1890
Lossee, Wm.	Private	Co. E, 4th Infantry	July 18, 1890
Latimer, Chas. A.	Private	Co. D, 6th Infantry	Aug. 13, 1890
Lawler, Patrick	Corporal	Co. A, 2d Cavalry	Aug. 18, 1890
Ladd, Wm.	Private	Co. L, 2d Cavalry	Aug. 27, 1890
Murphy, John	Private	Cos. E and K, 2d Infantry	Aug. 23, 1888
Mills, Alexander	Private	Co. F, 2d Cavalry	Oct. 2, 1888
Martino, Henry	Private	Co. D, 2d Infantry	Oct. 5, 1888
Murphy, John J.	Sergeant	Co. A, 7th Infantry	Nov. 16, 1888
Marshall, G. W.	Private	Co. E, 2d Infantry	Dec. 20, 1888
Martell, Theodore	Musician	3d Infantry	Jan. 15, 1889
Marsh, Joseph	Private	Co. F, 6th Infantry	Mar. 27, 1889
Morgan, Wm. B.	Private	Co. F, 5th Infantry	Aug. 3, 1889
Michaelis, Fred'k.	Private	Co. K, 5th Infantry	July 11, 1889
Michaelis, Fred'k.	Private	Co. D, 1st Veteran Infantry	July 11, 1889
Miner, Homer	Private	Co. C, 7th Infantry	June 24, 1889
Moore, David J.	Private	Co. D, 1st Mountaineers	June 12, 1889
Murphy, John	Private	Co. I, 2d Cavalry	Sept. 5, 1889
MacAllester, Alfred	Sergeant	Co. B, 2d Cavalry	Sept. 18, 1889
Marshall, Geo. W.	Private	Co. E, 2d Infantry	Sept. 24, 1889
Morris, Frank	Private	Co. C, 2d Infantry	Dec. 28, 1889
Mazon, Abel	Sergeant	Co. D, 1st Native Cavalry	Oct. 28, 1889
Moore, W. M.	Private	Co. B, 2d Cavalry	Feb. 20, 1890
Murphy, Edward	Private	Co. E, 1st Cavalry	Dec. 24, 1889
Mason, Richard B.	Private	Co. D, 5th Infantry	Mar. 14, 1890
Moe, Chas. N.	Private	Co. F, 7th Infantry	Feb. 4, 1890
Miller, John P.	Private	Co. A, 6th Infantry	Jan. 24, 1890
Miller, Louis	Private	Co. I, 6th Infantry	May 17, 1890
Martin, James	Private	Co. A, 1st Cavalry	May 3, 1890
McGreeney, Patrick	Private	Co. H, 1st Infantry	Apr. 14, 1890
Maynard, Chas. E.	Sergeant	Co. E, 1st Cavalry	Apr. 15, 1890
Martin, Geo. A.	Private	Co. A, 1st Cavalry	Apr. 14, 1890
McCormick, Jas.	Private	Co. C, 1st Infantry	May 26, 1890
Matterson, Oscar	Private	Co. B, 5th Infantry	May 9, 1890
Maynard, Chas. E.	Private	Co. C, 2d Cavalry	April 14, 1890
Marchant, Abraham	Private	Co. G, 2d Cavalry	July 18, 1890
Markel, David D.	Private	Co. G, 4th Infantry	July 18, 1890
Murphy, M. P.	Private	Co. F, 4th Infantry	July 23, 1890
Miller, Chas.	Sergeant	Co. D, 2d Infantry	Aug. 30, 1890

TABLE Q—Continued.

NAME.	Rank.	Organization.	When Issued.
Miller, Ruben	Private	Co. M, 2d Cavalry	Aug. 30, 1890
Moore, Joseph A.	Sergeant	Co. M, 1st Cavalry	Aug. 31, 1890
Macdonald, H. A.	Sergeant	S. D., 2d Cavalry	Oct. 16, 1888
McCoy, Harrison	Private	Co. E, 4th Infantry	July 9, 1888
McDermott, W. P.	Hos. Steward	1st Infantry	Sept. 18, 1888
McCool, R. H.	Private	Co. I, 6th Infantry	Oct. 12, 1888
McCann, John M.	Private	Co. H, 7th Infantry	Nov. 1, 1888
McClanahan, E.	Private	Co. I, 7th Infantry	Nov. 22, 1888
McDermott, M. I.	Private	Co. I, 6th Infantry	Jan. 15, 1889
McIntosh, James	Private	Co. I, 1st Cavalry	Mar. 11, 1889
McKinley, Jos. W.	Private	Co. A, 4th Infantry	July 2, 1889
McKinley, Jos. W.	Private	Co. E, 4th Infantry	July 18, 1889
McMahon, Thos.	Private	Co. I, 5th Infantry	July 8, 1889
McCabe, Edward	Private	Co. I, 2d Cavalry	May 23, 1889
McAllester, Alfred	Private	Co. B, 2d Cavalry	June 18, 1889
Macdonald, H. A.	Sergeant	S. D., 2d Cavalry	Oct. 3, 1889
McCann, Henry	1st Lieut.	Co. C, 4th Infantry	Dec. 5, 1889
McGowan, George	Private	Co. G, 4th Infantry	Dec. 13, 1889
McGregor, A.	Private	Co. F, 1st Infantry	July 24, 1890
McGregor, A.	Private	Co. A, 1st Veteran Infantry	July 24, 1890
McGuire, Francis D.	Corporal	Co. B, 1st Cavalry	July 28, 1890
McKennon, John	Private	Co. D, 1st Mountaineers	Aug. 18, 1890
Nicklas, John	Private	Co. B, 1st Mountaineers	Dec. 28, 1888
Norton, Michael	Private	Co. B, 1st Infantry	June 25, 1889
Nauls, George	Private	Co. B, 4th Infantry	Oct. 3, 1889
Neil, John	Private	Co. F, 1st Infantry	Mar. 22, 1890
Nudds, Albert E.	Private	Co. D, 2d Cavalry	June 3, 1890
Nugent, William	Private	Co. B, 5th Infantry	April 28, 1890
Noble, Samuel J.	Private	Co. C, 7th Infantry	May 8, 1890
Newsham, R. V.	Sergeant	Co. F, 5th Infantry	Aug. 31, 1890
Osier, Charles	Private	Co. B, 2d Cavalry	Sept. 3, 1888
Osborn, A. P.	Sergeant	Co. E, 1st Mountaineers	Feb. 28, 1889
Ocampo, Canido	Private	Co. D, 1st Native Cavalry	Jan. 13, 1890
Oaks, Samuel M.	Private	Co. F, 5th Infantry	Feb. 14, 1890
Ozman, Orsen S.	Private	Co. E, 3d Infantry	Mar. 6, 1890
Ozman, Orsen S.	Private	Co. K, 2d Cavalry	Mar. 6, 1890
Ossenbeck, Henry	Private	Co. G, 7th Infantry	July 30, 1890
Parker, John S.	Sergeant	Co. F, 1st Cavalry	Jan. 3, 1889
Parker, William	Private	Co. H, 2d Infantry	Jan. 25, 1889
Pease, R. W.	Private	Co. G, 4th Infantry	Feb. 27, 1889
Perkins, Hiram	Private	Co. G, 2d Infantry	April 18, 1889
Pettyman, James	Private	Co. H, 7th Infantry	April 10, 1889
Plummer, William	Private	Co. E, 2d Cavalry	Dec. 16, 1889
Pinley, John W.	Private	Co. B, 1st Veteran Infantry	Feb. 5, 1890
Pilcher, Lewis	Private	Co. D, 4th Infantry	Feb. 14, 1890
Pixley, Ruben	Private	Co. F, 3d Infantry	May 14, 1890
Proctor, William F.	Private	Co. E, 1st Infantry	May 21, 1890
Parks, Albert N.	Private	Co. K, 2d Cavalry	July 2, 1890
Riley, David	Private	Co. C, 2d Infantry	July 30, 1888
Ramsdell, Roland	Private	Co. B, 1st Mountaineers	Sept. 4, 1888
Ryan, Edward F.	Private	Co. I, 2d Cavalry	Sept. 1, 1888
Riehl, T. J.	Private	Co. I, 2d Cavalry	Oct. 11, 1888
Rogers, Edward	Private	Co. G, 2d Infantry	Oct. 13, 1888
Risden, Josiah	Private	Co. C, 1st Cavalry	Oct. 20, 1888
Robinson, J. M.	Private	Co. G, 8th Infantry	Oct. 25, 1888
Rice, Henry	Corporal	Cos. I and C, 3d Infantry	Nov. 16, 1888
Ryan, James	Private	Co. F, 3d Infantry	Nov. 24, 1888
Ryan, James	Private	Co. I, 2d Infantry	Nov. 24, 1888
Ruegg, Henry	Private	Co. K, 6th Infantry	Dec. 6, 1888
Richardson, Isaac	Private	Co. B, 3d Infantry	Dec. 13, 1888
Rochester, Richard	Private	Co. H, 5th Infantry	Jan. 23, 1889
Reardon, John R.	Private	Co. G, 2d Cavalry	Feb. 11, 1889
Ravekes, Henry J.	Private	Co. D, 8th Infantry	Apr. 26, 1889
Robbins, Thos. J.	Corporal	Co. D, 2d Infantry	June 4, 1889
Ransford, John	Private	Co. G, 7th Infantry	July 13, 1889
Rourke, John	Private	Co. H, 4th Infantry	July 15, 1889
Rodgers, Thomas	Private	Co. B, 8th Infantry	July 23, 1889
Ross, J. R.	Musician	4th Infantry	Aug. 12, 1889
Rice, George	Private	Co. I, 2d Cavalry	Aug. 30, 1889
Robertson, H. P.	Private	Co. G, 6th Infantry	Aug. 20, 1889

TABLE Q—Continued.

NAME.	Rank.	Organization.	When Issued.
Ross, George A.	Private	Co. E, 6th Infantry	Dec. 10, 1889
Richardson, J. W.	Private	Co. D, 7th Infantry	Nov. 12, 1889
Rice, Hiram	Private	Co. L, 2d Cavalry	Dec. 18, 1889
Ring, George S.	Private	Co. A, 7th Infantry	Mar. 14, 1890
Richards, Ruben	Private	Co. G, 5th Infantry	May 9, 1890
Rogers, Wm. E.	Private	Co. C, 4th Infantry	June 20, 1890
Rowles, Moss A.	Private	Co. A, 4th Infantry	June 28, 1890
Ring, Joseph	Private	Co. E, 2d Infantry	July 12, 1890
Rathburn, Jas. S.	1st Lieut.	Co. I, 4th Infantry	July 12, 1890
Ray, James J.	Private	Co. K, 2d Cavalry	July 12, 1890
Roley, James C.	2d Lieut.	Co. C, 2d Cavalry	July 18, 1890
Roberts, John	Sergt.-Major	2d Infantry	July 28, 1890
Ramsdell, Roland	Private	Co. B, 1st Mountaineers	Aug. 13, 1890
Stocking, Clark B.	Private	Co. A, 5th Infantry	Aug. 10, 1888
Smith, Robert H.	Private	Co. C, 1st Cavalry	Aug. 28, 1888
Somerville, Peter S.	Private	Co. I, 4th Infantry	Sept. 14, 1888
Sanders, A. P.	Private	Co. E, 2d Cavalry	Dec. 4, 1888
Spofford, Josiah	Private	Co. D, 1st Cavalry	Nov. 15, 1888
Sickel, Edward	Private	Co. H, 2d Cavalry	Jan. 28, 1889
Shaw, Samuel R.	Private	Co. A, 2d Cavalry	Feb. 1, 1889
Scott, James M.	Private	Co. D, 1st Mountaineers	Mar. 1, 1889
Sullivan, John	Private	Co. B, 4th Infantry	Mar. 6, 1889
Savey, Leon	Private	—, 3d Infantry	Mar. 4, 1889
Sanders, Frederick	Private	Co. I, 1st Infantry	June 20, 1889
Smith, John W.	Captain	Co. H, 7th Infantry	June 7, 1889
Sutterfield, C.	Private	Co. D, 2d Infantry	Apr. 18, 1889
Smith, A. M.	Private	Co. B, 2d Infantry	May 15, 1889
Smith, Thos. D.	Private	Co. G, 7th Infantry	June 4, 1889
Sanders, Fred.	Private	Co. I, 1st Infantry	June 27, 1889
Swett, Albert.	Corporal	Co. L, 2d Cavalry	July 13, 1889
Squibbs, David	Private	Co. E, 2d Infantry	Aug. 1, 1889
Smith, James J.	Private	Co. B, 4th Infantry	July 25, 1889
Smith, James J.	Private	Co. K, 5th Infantry	July 25, 1889
Stearer, Augustus	Private	Co. K, 2d Cavalry	Sept. 18, 1889
Stocking, Clark B.	Private	Co. A, 5th Infantry	Sept. 24, 1889
Stocking, Clark B.	Corporal	Co. E, 1st Veteran Infantry	Sept. 24, 1889
Smith, Torrence	Private	Co. E, 5th Infantry	Oct. 4, 1889
Scannel, Columbus	Private	Co. B, 5th Infantry	Feb. 4, 1890
Skinner, Martin B.	Private	Co. C, 4th Infantry	Feb. 13, 1890
Salazar, José M.	Private	Co. A, 1st Cavalry	Feb. 13, 1890
Sirland, Ed. M.	Captain	Co. C, 1st Cavalry	Dec. 19, 1889
Sargent, Jacob B.	Private	Co. F, 1st Cavalry	Feb. 4, 1890
Short, Elam S.	Private	Co. F, 4th Infantry	Feb. 8, 1890
Stewart, Thomas	Corporal	Co. H, 4th Infantry	Feb. 14, 1890
Schmitt, John H.	Private	Co. F, 3d Infantry	May 17, 1890
Schoonerer, Joseph H.	Private	Co. I, 4th Infantry	Apr. 14, 1890
Sawtell, John	Private	Co. C, 1st Cavalry	July 12, 1890
Snyder, S. L.	Q. M. Sergt.	1st Infantry	July 18, 1890
Stone, Joseph W.	Private	Co. A, 4th Infantry	July 18, 1890
Scott, Lyman W.	Private	Co. B, 4th Infantry	July 28, 1890
Smith, John	Private	Co. B, 6th Infantry	Aug. 11, 1890
Schafer, Henry	Private	Co. C, 3d Infantry	Aug. 18, 1890
Snyder, Geo. W.	Sergeant	Co. E, 1st Cavalry	Aug. 27, 1890
Southworth, Jas. E.	Private	Co. A, 1st Cavalry	Aug. 27, 1890
Smith, John O.	Private	Co. A, 1st Cavalry	Sept. 3, 1890
Timmins, Bernard	Private	Co. G, 5th Infantry	July 14, 1888
Tolliver, Ruben	Private	Co. G, 4th Infantry	July 9, 1888
Thompson, Edward	Corporal	Co. B, 2d Cavalry	Aug. 1, 1888
Trewen, Robert	Sergeant	Co. C, 8th Infantry	Sept. 14, 1888
Taylor, Geo. W.	Corporal	Co. A, 4th Infantry	Nov. 9, 1888
Tousley, Darius	Private	Co. E, 4th Infantry	Dec. 11, 1888
Timons, Thos. O.	Private	Co. C, 1st Cavalry	Mar. 16, 1889
Tomney, John	Corporal	Co. H, 1st Cavalry	July 18, 1889
Thompson, Peter	Private	Co. C, 1st Infantry	Aug. 29, 1889
Tyler, Francis A.	Private	Co. A, 5th Infantry	Sept. 18, 1889
Taylor, Wm. H.	Private	Co. B, 1st Cavalry	Oct. 22, 1889
Tracy, Vernet	Private	Co. B, 8th Infantry	Dec. 18, 1889
Taylor, John	Private	Co. C, 1st Veteran Infantry	Nov. 11, 1889
Taylor, John	Private	Co. E, 5th Infantry	Nov. 11, 1889
Taylor, Wm. M.	Private	Co. E, 8th Infantry	Mar. 13, 1890

TABLE Q—Continued.

NAME.	Rank.	Organization.	When Issued.
Tomney, John	Corporal	Co. H, 1st Cavalry	July 18, 1890
Taylor, Wm. M.	Private	Co. E, 8th Infantry	Mar. 31, 1890
Taylor, Silas M.	Private	Co. C, 1st Cavalry	May 3, 1890
Thompson, Wm.	Private	Co. B, 1st Infantry	May 14, 1890
Tarwetten, Diedrich	Private	Co. A, 2d Cavalry	April 19, 1890
Thomas, Alfred J.	Private	Co. A, 2d Cavalry	May 13, 1890
Tassell, Eugene	Private	Co. H, 3d Infantry	July 23, 1890
Taylor, Robert	Bugler	Co. B, 5th Infantry	July 23, 1890
Travis, William	Private	Co. B, 2d Cavalry	Aug. 27, 1890
Tibbetts, Abraham	Private	Co. A, 5th Infantry	Aug. 27, 1890
Valencia, Juan Y.	Private	Co. C, Native Cavalry	Mar. 22, 1889
Van Seoyk, Jacob	Private	Co. K, 2d Cavalry	Dec. 16, 1889
Vose, Rufus C.	Captain	Co. B, 1st Cavalry	Feb. 3, 1890
Van Winkle, Wm.	Private	Cos. E and A, 1st Infantry	May 24, 1890
Vestal, Tilman	Private	Co. A, 8th Infantry	May 17, 1890
Valencia, Narcisco	Private	Co. C, 1st Native Cavalry	June 28, 1890
Voorhees, Wm. C.	Private	Co. C, 7th Infantry	Aug. 13, 1890
Voorhees, Wm. C.	Private	Co. C, 2d Infantry	Aug. 13, 1890
Walker, James	Private	Co. F, 3d Infantry	Aug. 17, 1888
Winchell, Theo. C.	1st Lieut.	Adjutant, 2d Infantry	Sept. 15, 1888
Wilbur, Parker R.	Sergeant	Co. A, 4th Infantry	Sept. 14, 1888
Wright, Ben F.	Private	Co. E, 2d Cavalry	Sept. 27, 1888
Waller, Ed. J.	Private	Co. A, 5th Infantry	Nov. 2, 1888
Witham, B. F.	Private	Co. E, 2d Infantry	Dec. 20, 1888
Wakman, A. C.	1st Lieut.	5th Infantry	Feb. 20, 1889
Webster, Wm. M.	Private	Co. I, 4th Infantry	Mar. 13, 1889
Whitaker, Geo. H.	Private	Co. F, 1st Infantry	May 4, 1889
Woods, W. T.	Private	Co. B, 7th Infantry	April 18, 1889
Williams, S. W.	Private	Co. E, 2d Infantry	May 13, 1889
Watts, Wm. H.	Private	Co. E, 5th Infantry	June 29, 1889
Wilson, Wm. H.	Private	Co. B, 5th Infantry	June 26, 1889
Wilson, Wm. H.	Private	Co. G, 1st Veteran Infantry	July 18, 1889
Williams, B. N.	Corporal	Co. F, 1st Infantry	Aug. 13, 1889
Wilson, Henry	Private	Co. K, 6th Infantry	Aug. 15, 1889
Williams, John	Private	Co. E, 6th Infantry	Aug. 15, 1889
Wilson, Richard	Private	Co. I, 2d Infantry	Sept. 5, 1889
Warren, Samuel M.	Private	Co. C, 4th Infantry	Nov. 22, 1889
Wilson, Samuel E.	Private	Co. K, 7th Infantry	Nov. 22, 1889
Webb, Chas. H.	Private	Co. B, 2d Cavalry	Feb. 14, 1890
Webber, Henry	Private	Co. H, 1st Infantry	Feb. 28, 1890
Woods, Chris.	Sergeant	Co. C, 1st Cavalry	Jan. 1, 1890
Wall, James	Private	Co. C, 3d Infantry	Mar. 5, 1890
Wall, James	Private	Co. I, 3d Infantry	Mar. 5, 1890
West, Darius	Private	Co. I, 6th Infantry	April 29, 1890
Werneke, Charles	Private	Co. I, 5th Infantry	June 20, 1890
Warne, Charles	Private	Co. H, 3d Infantry	June 18, 1890
Wurster, John	Private	Co. I, 8th Infantry	May 19, 1890
Weber, Henry	Private	Co. H, 1st Infantry	April 29, 1890
Woffender, Richard	Private	Co. A, 1st Mountaineers	April 19, 1890
Wiley, Gus A.	Private	Co. F, 1st Cavalry	May 9, 1890
Waller, E. J.	Private	Co. A, 5th Infantry	April 19, 1890
Wilkins, A. F.	Private	Co. C, 4th Infantry	July 18, 1890
Wilson, Wm.	Private	Co. E, 6th Infantry	July 30, 1890
Walcott, Chas. K.	2d Lieut.	Co. E, 2d Cavalry	Aug. 13, 1890
Wainstell, Robinson	Private	Co. K, 6th Infantry	Aug. 13, 1890
Waldron, R. B.	Private	Co. F, 5th Infantry	Aug. 27, 1890
Williams, James	Private	Co. D, 2d Cavalry	Aug. 31, 1890
Yoder, Enoch E.	Private	Co. L, 2d Cavalry	Jan. 8, 1890

TABLE R.

HONORARY CERTIFICATES OF MEMBERSHIP, AS PRESCRIBED BY SECTION 1962, ISSUED FROM
JULY 1, 1888, TO JUNE 30, 1890.

NAME.	Organization.	Brigade.	When Issued.
Burns, Isadore	Co. A, 2d Artillery	Second	Sept. 17, 1888
Barton, Hiram H.	Co. E, 7th Infantry	First	Nov. 13, 1888
Bryant, George H.	Co. B, 1st Infantry	Second	Nov. 8, 1888
Becker, B. A.	Co. F, 2d Artillery	Second	Jan. 15, 1889
Bryant, George H.	Co. B, 1st Infantry	Second	Nov. 8, 1889
Burns, Isadore	Co. A, 2d Artillery	Second	Sept. 17, 1889
Becker, B. A.	Co. F, 2d Artillery	Second	Jan. 15, 1890
Bailey, James D.	Co. E, 2d Artillery	Second	Mar. 6, 1890
Carpenter, Edwin W.	Co. G, 2d Artillery	Second	Jan. 21, 1889
Carpenter, Edwin W.	Co. G, 2d Artillery	Second	Jan. 21, 1890
Doe, Charles F.	Co. G, 1st Infantry	Second	Mar. 31, 1890
Dalbeer, John	Co. B, 1st Infantry	Second	July 30, 1890
Easton, Wendel	Co. F, 2d Artillery	Second	April 12, 1889
Easton, Wendel	Co. F, 2d Artillery	Second	April 12, 1890
Foye, Wm. R. S.	Co. B, 1st Infantry	Second	Oct. 24, 1888
Foster, George H.	Co. B, 1st Infantry	Second	May 21, 1889
Foye, Wm. R. S.	Co. B, 1st Infantry	Second	Oct. 20, 1889
Foster, George H.	Co. B, 1st Infantry	Second	May 21, 1890
Gardiner, M. V. B.	Co. D, 3d Infantry	Second	Feb. 12, 1890
Holmes, C. S.	Co. F, 2d Artillery	Second	April 12, 1889
Hess, Joseph L.	Co. F, 2d Artillery	Second	June 9, 1889
Haraszthy, Arpad.	Co. C, 1st Infantry	Second	Jan. 26, 1890
Hotaling, Anson P.	Co. C, 2d Artillery	Second	Mar. 31, 1890
Holmes, C. S.	Co. F, 2d Artillery	Second	April 12, 1890
Heywood, Franklin	Co. B, 1st Infantry	Second	April 22, 1890
Hess, Joseph L.	Co. F, 2d Artillery	Second	June 9, 1890
Jackson, A. W.	Co. F, 1st Infantry	Second	June 23, 1889
James, Nathaniel T.	Co. E, 2d Artillery	Second	Mar. 6, 1890
Jackson, A. W.	Co. F, 1st Infantry	Second	June 23, 1890
Laton, Chas. A.	Co. G, 2d Artillery	Second	Dec. 18, 1889
Montague, W. W.	Co. F, 2d Artillery	Second	Mar. 10, 1889
Montague, W. W.	Co. F, 2d Artillery	Second	Mar. 10, 1890
Palache, Gilbert	Co. C, 1st Infantry	Second	April 27, 1889
Patridge, R. K.	Co. B, 1st Infantry	Second	Sept. 5, 1889
Palmer, Wales L.	Cadet Co., 1st Infantry	Second	Mar. 1, 1889
Palmer, Wales L.	Cadet Co., 1st Infantry	Second	Mar. 1, 1890
Palache, Gilbert	Co. C, 1st Infantry	Second	April 27, 1890
Payne, George L.	Co. B, 1st Infantry	Second	June 19, 1890
Rosenfeld, John	Co. F, 1st Infantry	Second	Jan. 14, 1889
Rix, Edward A.	Co. F, 2d Artillery	Second	Jan. 15, 1889
Richardson, W. G.	Co. B, 1st Infantry	Second	Feb. 18, 1889
Rix, Edward A.	Co. F, 2d Artillery	Second	Jan. 15, 1890
Richardson, W. G.	Co. B, 1st Infantry	Second	Feb. 18, 1890
Rosenfeld, John	Co. F, 1st Infantry	Second	Jan. 14, 1890
Stone, L. D.	Co. B, 1st Infantry	Second	July 11, 1888
Steinheart, I.	Co. F, 2d Artillery	Second	Mar. 17, 1889
Suydam, Jas. N.	Co. A, 2d Artillery	Second	May 15, 1889
Stone, L. D.	Co. B, 1st Infantry	Second	Mar. 21, 1889
Steinheart, I.	Co. F, 2d Artillery	Second	Mar. 17, 1890
Suydam, Jas. N.	Co. A, 2d Artillery	Second	May 15, 1890
Stone, L. D.	Co. B, 1st Infantry	Second	May 21, 1890
Talbot, W. H.	Cadet Co., 1st Infantry	Second	Jan. 14, 1889
Talbot, C. F. A.	Cadet Co., 1st Infantry	Second	Jan. 14, 1889
Talbot, Fred. C.	Cadet Co., 1st Infantry	Second	Feb. 4, 1889
Tillman, Fred.	Co. C, 2d Artillery	Second	June 20, 1889
Talbot, W. H.	Cadet Co., 1st Infantry	Second	Jan. 14, 1890
Talbot, C. F. A.	Cadet Co., 1st Infantry	Second	Jan. 14, 1890
Talbot, Fred. C.	Cadet Co., 1st Infantry	Second	Feb. 4, 1890
Tilton, Chas. S.	Co. G, 1st Infantry	Second	May 2, 1890
Tillman, Fred.	Co. C, 2d Artillery	Second	June 20, 1890
Vail, A. H.	Co. F, 1st Infantry	Second	Feb. 3, 1890
Wesson, Joseph W.	Co. B, 1st Infantry	Second	April 23, 1889
Wesson, Joseph W.	Co. B, 1st Infantry	Second	April 23, 1890
Weleh, Samuel B.	Co. F, 2d Artillery	Second	June 24, 1890

TABLE S.

LIST OF COMMISSIONS ISSUED TO OFFICERS OF THE UNIVERSITY CADETS.

Class of 1889.

NAME AND RANK.	Date of Rank.	Qualified.
<i>Colonel.</i>		
Herbert Charles Moffitt.....	June 26, 1889.....	June 26, 1889
<i>Lieutenant-Colonel.</i>		
Joseph Lincoln Steffens	June 26, 1889.....	June 26, 1889
<i>Major.</i>		
Charles Gore Bonner	June 26, 1889.....	June 26, 1889
<i>Captains.</i>		
Charles Albert Noble	June 26, 1889.....	June 26, 1889
John Alonzo Sands	June 26, 1889.....	June 26, 1889
Lincoln Hutchinson	June 26, 1889.....	June 26, 1889
Edward Von Adelung	June 26, 1889.....	June 26, 1889
<i>First Lieutenants.</i>		
Henry Alexander Melvin.....	June 26, 1889.....	June 26, 1889
Charles Edward Holmes.....	June 26, 1889.....	June 26, 1889
Thomas Berry Sullivan	June 26, 1889.....	June 26, 1889
Arthur Peronneau Hayne	June 26, 1889.....	June 26, 1889
<i>Second Lieutenants.</i>		
Armond Lazarus	June 26, 1889.....	June 26, 1889
John Henry Schutte.....	June 26, 1889.....	June 26, 1889

Class of 1890.

NAME AND RANK.	Date of Rank.	Qualified.
<i>Colonel.</i>		
Norman Russell Lang	June 25, 1890.....	June 26, 1890
<i>Lieutenant-Colonel.</i>		
Henry Gridley Parker	June 25, 1890.....	June 26, 1890
<i>Major.</i>		
Henry French Bailey	June 25, 1890.....	June 26, 1890
<i>Captains.</i>		
William Sidney Smith.....	June 25, 1890.....	June 26, 1890
Fred. William McNear	June 25, 1890.....	June 26, 1890
David Guernsey Jones	June 25, 1890.....	June 26, 1890
Edward H. Stearns.....	June 25, 1890.....	June 26, 1890
<i>First Lieutenants.</i>		
Guy H. Stokes	June 25, 1890.....	June 26, 1890
Donzel Stoney	June 25, 1890.....	June 26, 1890
Edward Coke Hill	June 25, 1890.....	June 26, 1890
David Clarence Demarest.....	June 25, 1890.....	June 26, 1890
Richard Frank Dean	June 25, 1890.....	June 26, 1890
Leslie Randal Hewett	June 25, 1890.....	June 26, 1890
Samuel S. Peck	June 25, 1890.....	June 26, 1890
<i>Second Lieutenants.</i>		
Arthur Fisher Mack	June 25, 1890.....	June 26, 1890
Orrin Kip McMurray	June 25, 1890.....	June 26, 1890
Jabez Arthur Jenkins	June 25, 1890.....	June 26, 1890

REPORT
OF THE
SURVEYOR-GENERAL

OF THE
STATE OF CALIFORNIA,

FROM AUGUST 1, 1888, TO AUGUST 1, 1890.



SACRAMENTO:
STATE OFFICE, : : : : : J. D. YOUNG, SUPT. STATE PRINTING.
1890.

REPORT.

STATE OF CALIFORNIA, OFFICE OF SURVEYOR-GENERAL, }
SACRAMENTO, August 1, 1890. }

To his Excellency R. W. WATERMAN, Governor of California:

DEAR Sir: In accordance with the requirements of the law relating to the duties of the Surveyor-General, I have the honor to submit the following report of the transactions of this office from August 1, 1888, to August 1, 1890.

THEO. REICHERT,
Surveyor-General and ex officio Register of State Land Office.

REPORT OF THE SURVEYOR-GENERAL.

AREA OF THE STATE OF CALIFORNIA.

The following statement, the latest procurable, furnished by the United States Surveyor-General for California in 1882, shows that the estimated area of the State of California is 100,500,000 acres, apportioned as follows:

SUBDIVISION.	Area—Acres.
Agricultural and mineral lands surveyed to June 30, 1882.....	61,887,392
Agricultural and mineral lands unsurveyed	26,211,501
Private grants patented	8,383,375
Private grants not settled	341,650
Indian military reservations	318,631
Lakes, islands, bays, and navigable rivers	1,531,700
Swamp and overflowed lands surveyed.....	1,635,227
Swamp and overflowed lands unsurveyed.....	85,524
Salt marsh and tide lands around San Francisco Bay.....	100,000
Salt marsh and tide lands around Humboldt Bay.....	5,000
Total.....	100,500,000

GENERAL OFFICE BUSINESS.

Applications to purchase school lands in the following districts have been received and filed, as follows:

DISTRICTS.	From Aug. 1, 1880, to Aug. 1, 1882.	From Aug. 1, 1882, to Aug. 1, 1884.	From Aug. 1, 1884, to Aug. 1, 1886.	From Aug. 1, 1886, to Aug. 1, 1888.	From Aug. 1, 1888, to Aug. 1, 1890.
	Acres.	Acres.	Acres.	Acres.	Acres.
Los Angeles	18,346.24	64,059.36	118,575.92	983,510.31	466,951.95
Visalia	9,900.00	16,200.00	122,992.58	285,325.28	136,562.78
Stockton	14,023.17	13,500.37	29,024.04	127,466.11	166,351.63
San Francisco	40,137.15	84,906.64	118,575.92	403,400.52	312,943.01
Sacramento	4,563.88	17,968.98	29,228.56	77,936.92	94,183.93
Bodie, now Independence	6,398.18	9,119.92	11,569.90	370,299.31	291,162.68
Marysville	11,843.54	13,614.29	12,885.42	58,301.22	67,751.86
Susanville	15,676.83	9,027.84	36,794.43	457,540.52	440,083.97
Shasta	3,763.30	33,303.36	38,354.05	331,102.83	480,218.22
Humboldt	4,736.29	30,398.50	36,203.36	68,480.02	97,660.24
For swamp and overflowed lands	28,138.80	196,677.58	153,361.79	148,543.54	62,348.29
Totals	157,527.38	488,776.84	707,565.97	3,312,406.58	2,616,218.56

Approvals of applications have been made as follows:

	From Aug. 1, 1880, to Aug. 1, 1882.	From Aug. 1, 1882, to Aug. 1, 1884.	From Aug. 1, 1884, to Aug. 1, 1886.	From Aug. 1, 1886, to Aug. 1, 1888.	From Aug. 1, 1888, to Aug. 1, 1890.
	Acres.	Acres.	Acres.	Acres.	Acres.
For school lands, covering.....	75,503.36	210,865.53	350,881.11	781,395.17	919,770.47
For swamp and overflowed and tide lands, covering.....	21,046.39	71,423.73	154,375.37	34,186.43	48,355.87
Totals	96,549.75	282,289.26	505,256.48	815,581.60	968,126.34

CERTIFICATES OF PURCHASE ISSUED.

From August 1, 1880, to August 1, 1882:

GRANT.	Number of Certificates.	Acres.
Sixteenth and Thirty-sixth Sections.....	256	51,645.17
Five hundred thousand acres.....	7	2,800.00
Swamp and overflowed lands.....	41	10,812.59
Totals	304	65,257.76

From August 1, 1882, to August 1, 1884:

GRANT.	Number of Certificates.	Acres.
Sixteenth and Thirty-sixth Sections.....	881	179,295.36
Five hundred thousand acres.....	22	6,646.42
Swamp and overflowed lands.....	131	56,458.05
Totals.....	1,034	242,399.83

From August 1, 1884, to August 1, 1886:

GRANT.	Number of Certificates.	Acres.
Sixteenth and Thirty-sixth Sections.....	1,246	274,530.91
Five hundred thousand acres.....	2	360.00
Swamp and overflowed lands.....	328	129,893.69
Tide lands.....	14	4,217.78
Totals	1,590	409,002.38

From August 1, 1886, to August 1, 1888:

GRANT.	Number of Certificates.	Acres.
Sixteenth and Thirty-sixth Sections.....	1,373	487,523.44
Swamp and overflowed lands.....	131	37,987.91
Tide lands	18	2,411.11
Totals.....	1,522	527,922.46

From August 1, 1888, to August 1, 1890:

GRANT.	Number of Certificates.	Acres.
Sixteenth and Thirty-sixth Sections.....	1,182	442,460.54
Five hundred thousand acres.....	6	1,402.75
Swamp and overflowed lands.....	155	41,714.50
Tide lands.....	8	687.69
Totals.....	1,351	486,265.48

PATENTS ISSUED.

From August 1, 1880, to August 1, 1882:

GRANT.	Number of Patents.	Acres.
Sixteenth and Thirty-sixth Sections.....	311	114,447.29
Five hundred thousand acres.....	55	16,804.57
Seventy-two sections (Seminary).....	1	160.00
Swamp and overflowed lands.....	178	72,689.12
Tide lands.....	3	546.63
Totals.....	548	204,647.61

From August 1, 1882, to August 1, 1884:

GRANT.	Number of Patents.	Acres.
Sixteenth and Thirty-sixth Sections.....	790	219,852.22
Five hundred thousand acres.....	82	35,790.11
Swamp and overflowed lands.....	161	82,124.58
Salt marsh and tide lands.....	11	1,769.58
Totals.....	1,044	339,536.49

From August 1, 1884, to August 1, 1886:

GRANT.	Number of Patents.	Acres.
Sixteenth and Thirty-sixth Sections.....	506	117,567.00
Five hundred thousand acres.....	35	9,544.51
Swamp and overflowed lands.....	175	78,028.78
Tide lands.....	4	968.12
Totals.....	720	206,108.41

From August 1, 1886, to August 1, 1888:

GRANT.	Number of Patents.	Acres.
Sixteenth and Thirty-sixth Sections.....	701	220,825.87
Five hundred thousand acres.....	35	9,319.89
Seventy-two sections (Seminary).....	1	320.00
Ten sections (Public Buildings).....	1	160.00
Swamp and overflowed lands.....	270	95,934.96
Tide lands.....	12	626.84
Totals.....	1,020	327,187.56

From August 1, 1888, to August 1, 1890:

GRANT.	Number of Patents.	Acres.
Sixteenth and Thirty-sixth Sections.....	709	223,128.68
Five hundred thousand acres.....	30	6,233.58
Swamp and overflowed lands.....	154	55,713.52
Tide lands.....	23	2,205.77
Totals.....	916	287,281.55

LANDS LISTED TO THE STATE.

From August 1, 1888, to August 1, 1890, the following amounts of land have been listed to the State of California by the United States:

GRANT.	Acres.
Indemnity (lieu) lands.....	19,410.18
Swamp lands.....	9,406.07
Internal Improvement (500,000 acres) Grant.....	5,612.73
Agricultural College Grant.....	1,220.82
Seminary Lands.....	1,154.07
Public Building Grant.....	320.78
Total.....	37,124.65

CONTESTED LAND CASES.

From August 1, 1888, to August 1, 1890, one hundred and ninety-two proferts were issued from the office of the Surveyor-General.

SWAMP LAND DISTRICTS.

From August 1, 1888, to August 1, 1890, Swamp Land Districts were formed and reported to this office, as follows:

NO. OF DISTRICT.	County.	Date of Filing.
515.....	Siskiyou.....	August 2, 1888.
516.....	Lassen.....	August 23, 1888.
517.....	Lassen.....	August 23, 1888.
518.....	Kern.....	January 10, 1889.
519.....	Kern.....	January 11, 1889.
520.....	Lassen.....	April 1, 1889.
521.....	Butte.....	May 14, 1889.
522.....	Colusa.....	May 24, 1889.
523.....	Humboldt.....	June 3, 1889.
524 (consolidating Nos. 110, 209, and 302).....	San Joaquin.....	November 11, 1889.
525.....	Plumas.....	November 12, 1889.
526.....	Lassen.....	November 26, 1889.
527.....	Yolo.....	April 25, 1890.
528.....	Lake.....	July 17, 1890.

Since August 1, 1888, and up to August 1, 1890, evidence of complete reclamation, or the expenditure of \$2 per acre on works of reclamation, have been received from County Boards of Supervisors for the following described Swamp Land Districts, and the proper statements in relation thereto have been sent to the County Treasurers:

Number of District.	County.	Area—Acres.	Amount of Purchase Money reported to County Treasurers.	Remarks.
515.....	Siskiyou.....	640.00	\$170 92	Complete.
516.....	Lassen.....	390.43	88 86	Complete.
519.....	Kern.....	16,535.19	3,475 05	.....\$2 per acre expended.
520.....	Lassen.....	160.00	74 80	Complete.
473.....	Mendocino.....	1,080.00	302 40	.....\$2 per acre expended.
501.....	Solano.....	11,879.27	8,208 64	.....\$2 per acre expended.
143.....	San Diego.....	532.72	257 48	.....\$2 per acre expended.
523.....	Humboldt.....	2,262.12	1,137 43	.....\$2 per acre expended.
527.....	Yolo.....	5,946.01	6,416 58	.....\$2 per acre expended.
525.....	Plumas.....	400.00	201 38	Complete.
Totals.....		39,825.74	\$20,333 54	

FEES.

Amount of fees collected by Surveyor-General and paid into the State Treasury from August 1, 1888, to August 1, 1890:

1888—August.....	\$1,958 00
September.....	2,151 00
October.....	1,872 00
November.....	1,655 50
December.....	1,949 50
1889—January.....	2,111 00
February.....	2,894 00
March.....	2,101 50
April.....	1,011 50
May.....	1,804 00
June.....	507 00
July.....	772 50
August.....	603 50
September.....	734 50
October.....	641 00
November.....	709 00
December.....	681 00
1890—January.....	525 50
February.....	741 00
March.....	382 00
April.....	555 50
May.....	447 00
June.....	404 00
July.....	405 00
Total.....	\$27,616 50

Amount of deposits received by the Surveyor-General under Acts of March 20, 1889, to August 1, 1890, and paid into the State Treasury:

1889—March.....	\$800 00
April.....	(All returned to depositors.)
May (from twentieth).....	660 00
June.....	1,380 00
July.....	2,020 00
August.....	1,860 00
September.....	2,380 00
October.....	1,740 00
November.....	2,180 00
December.....	2,260 00
1890—January.....	1,540 00
February.....	2,260 00
March.....	1,260 00
April.....	1,720 00
May.....	1,320 00
June.....	1,260 00
July.....	1,340 00
Total.....	\$25,980 00

Amount of fees collected by Register State Land Office and paid into the State Treasury from August 1, 1888, to August 1, 1890:

1888—August	\$162 00
September	117 00
October	144 00
November	80 50
December	157 50
1889—January	1,311 00
February	201 00
March	137 50
April	312 00
May	153 00
June	785 00
July	150 00
August	120 50
September	120 00
October	147 00
November	138 00
December	129 00
1890—January	849 00
February	699 00
March	141 00
April	288 00
May	132 00
June	546 00
July	207 00
Total	\$7,225 50

Amount of fees collected by Register State Land Office and paid to Secretary of State from August 1, 1888, to August 1, 1890:

1888—August	\$116 00
September	78 00
October	95 00
November	50 00
December	117 00
1889—January	136 00
February	107 00
March	89 00
April	94 00
May	70 00
June	79 00
July	106 00
August	59 00
September	76 00
October	74 00
November	58 00
December	151 00
1890—January	63 00
February	71 00
March	85 00
April	96 00
May	78 00
June	60 00
July	68 00
Total	\$2,076 00

Amount fees Surveyor-General's office	\$27,616 50
Amount deposits Surveyor-General's office	25,980 00
Amount fees Register State Land Office	7,225 50
Amount fees collected by Register State Land Office for Secretary of State	2,076 00
Total	\$62,898 00

More than seven thousand letters have been received and answered, and \$15,627 have been returned to applicants or their attorneys.

In May, 1890, complete Delinquent Lists were sent to the District Attorneys of each county in the State where there were delinquent purchasers of State School Lands.

DELINQUENT INTEREST ON STATE LANDS.

Suits in foreclosure, instituted because of the non-payment of the annual interest due on State lands, are extremely expensive legal proceedings; and long experience has demonstrated that such suits invariably result in loss rather than benefit to the interest of the State. If the lands are of value, the delinquent interest is always paid, even though it often amounts to as much as the principal. On the other hand, when the lands revert to the State they are found to be of no value whatever, and the State suffers the loss of the expense of the suit in foreclosure.

I would recommend that some action be taken by the next Legislature amending the present law relative to this matter and make different provision for the payment of the costs in foreclosure suits, as the present law is unsatisfactory to the State departments having to do with the matter and to parties in interest who do the work, without knowing whether or not their bills will ever be paid.

This is an important matter and should receive careful attention from the Legislature.

NATIONAL PARKS IN CALIFORNIA.

By recent Acts of Congress seventy-six (76) square miles, or nearly fifty thousand (50,000) acres of land in Tulare County were withdrawn from settlement, occupancy, or sale under the laws of the United States and dedicated and set apart as a public park or pleasure ground for the benefit and enjoyment of the people.

Also, a tract of land comprising forty-two (42) townships, covering an area of about fifteen hundred (1,500) square miles, being approximately nine hundred and sixty thousand (960,000) acres, situated in Tuolumne, Mariposa, and Mono Counties, was set apart as a public park to be called "The Yosemite National Park."

Some action should be taken by the Legislature relative to the State lands embraced in these reservations.

AN ACT

To provide for the applications for purchase of sixteenth and thirty-sixth sections, and to regulate the application for purchase of such sections, and requiring a deposit to accompany all applications for purchase of the same.

[Approved March 20, 1889.]

The People of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. Every application to purchase any portion of the sixteenth and thirty-sixth sections shall be accompanied by a deposit of twenty dollars, in addition to the fee for filing now required by law, for which the Surveyor-General shall give the applicant a receipt, which receipt shall be accepted by the County Treasurer in part payment of the purchase price of said land. If the applicant shall abandon or forfeit his said application, or shall fail to make proper proof as to the character of the said land, or as to his residence thereon, within the time allowed by law, or if his application shall be rejected by reason of any false statement in the affidavit herein contained, the twenty dollars thus paid shall go to the State School Fund. If it is found that the Surveyor-General erred in receiving the application, or that the State cannot make a good title to the land, then the applicant, or his assigns, may surrender to the Surveyor-General the said receipt and receive in exchange therefor a certificate showing the amount so paid, and the reason why the application could not be approved or perfected, and the Controller, upon the surrender to him of the said Surveyor-General's certificate, shall issue to the applicant, or his assigns, a warrant for the said amount.

SEC. 2. Any number of filings on any section of land is hereby permitted and allowed under the provisions of this Act. Should the first filing be abandoned by the applicant, the next filing on such section, in order, shall have the same right as if it had been the first filing.

Sec. 3. The moneys received by the Surveyor-General, under the provisions of this Act, except the moneys forfeited under section one, shall be paid to the State Treasurer at the close of each month, and must be placed in a fund to be called "School Land Deposit Fund," to the credit of the county in which the lands applied for are situated. When any moneys are placed in the "School Deposit Fund" to the credit of a county, the Controller, at the next settlement with the Controller by the Treasurer of such county, must draw his warrant upon the State Treasurer for the amount in the fund to the credit of the county; *provided*, that the direction herein to the Controller is exempted from the operations of section six hundred and seventy-two of the Political Code.

Referring to the Act of March 20, 1889, would state that in my opinion it has resulted in much good to the State.

No person who desires to enter school lands "for their own use and benefit" objects to making the required deposit of \$20, which can afterward be applied as part payment on the land, and the result of the law has been to defer speculators from "tying up" a large number of sections for the small sum of \$10 per year, simply holding same for speculation, and thus prevent legitimate purchasers, and in many cases actual settlers, from entering the lands without first purchasing the abandonment of such speculator; and, in many cases, "agents" have compelled home-seekers to pay them a large bonus for an invalid claim rather than be put to the annoyance and expense of a suit at law. In a word, I consider it a good law and its practical workings beneficial to the State and bona fide purchasers of school lands.

FIVE HUNDRED THOUSAND-ACRE GRANT.

Owing to the complicated condition of this grant, I found it necessary to go to Washington, D. C., and lay the matter of the State's claim before the Department of the Interior, in order to secure an adjustment between the State and the United States.

I succeeded in securing the listing to the State of $5,612\frac{73}{100}$ acres of land in said grant, thus enabling many parties to obtain patents from the State for their lands, which, in some cases, had been paid for in full years ago, but for which patents could not issue, as the land had not been certified to the State. (Sec. 3521, Political Code.)

The expense of my trip, paid by the State (\$420 50), was fully compensated to the State by the settlement of these claims.

The adjustment practically closes the grant, there being only a few claims which have not as yet reached final determination.

STATE BOUNDARY LINE.

AN ACT TO PROVIDE FOR THE CORRECTION AND ESTABLISHMENT OF A PORTION OF THE EASTERN BOUNDARY LINE OF THE STATE OF CALIFORNIA, AND TO APPROPRIATE MONEY THEREFOR.

[Approved February 26, 1889.]

The People of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. The Surveyor-General of this State is hereby authorized and directed to correct and establish that portion of the eastern boundary line of the State of California, southeastward from Lake Tahoe; that is to say, southeastward from the intersection of the thirty-ninth degree of north latitude with the one hundred and twentieth degree of longitude west of Greenwich; *provided*, the whole cost of the work shall not exceed the sum of five thousand dollars; and *provided further*, that the work be completed within one year after the passage of this Act.

SEC. 2. The Surveyor-General of this State is hereby empowered to employ such assistance and purchase such material as may be necessary to carry out the provisions of this Act. The Surveyor-General shall certify to the State Board of Examiners the correctness of all accounts for assistance rendered, and for materials furnished to him to carry out the provisions of this Act; who shall, if found correct, approve the same, and order their payment out of the fund created by this Act.

SEC. 3. It shall be the duty of the Surveyor-General, under the provisions of this Act, to first correct and establish said boundary line southeastward from the point of intersection of the thirty-ninth degree of north latitude with the one hundred and twentieth degree of longitude west from Greenwich, and there to mark with stakes in mounds of stones the said line as so corrected and established. The Surveyor-General shall cause three copies of the maps and field notes of such survey to be prepared, and shall attach his certificate to each copy, setting forth that each map and accompanying field notes is a correct and true copy of the original survey made by him, one of which shall be sent to the Department of the Interior at Washington, with a copy of this law; one copy shall be filed in the office of the Secretary of State, and one copy retained in the office of the Surveyor-General; and such line or any part thereof, when corrected and marked as provided in this Act, shall thereafter be regarded as the legally established eastern boundary line of the State of California, when confirmed by the United States Government, from the points of intersection hereinbefore set forth; and the record of said boundary line, as corrected and established by this Act, and confirmed as hereinbefore provided, shall be recognized and admitted in all the Courts of this State as conclusive evidence that such line is the true boundary line of that portion of the eastern boundary line of this State as this Act corrects and establishes.

SEC. 4. The Surveyor-General shall enter upon the discharge of the duties enjoined by the provisions of this Act on or before the first day of June, eighteen hundred and eighty-nine next, and shall complete the survey as soon thereafter as practicable, and shall, within sixty days after completion of the work, cause to be made out the copies and field notes, and file and forward them as provided by this Act. He shall make to the next Legislature a full and detailed report of the manner in which the said survey and work has been made, the cost, in items, of the same, and the manner in which he has expended the funds placed in his hands by the provisions of this Act; and he shall pay into the State Treasury any of such funds which may be unexpended after the completion of said survey and work.

SEC. 5. The sum of five thousand dollars is hereby appropriated and set apart out of the General Fund of this State to carry out the provisions of this Act.

SEC. 6. The Controller is hereby directed to draw his warrant on the Treasurer, in favor of the Surveyor-General, payable out of the said five thousand dollars so appropriated and set apart, for the sum of one thousand dollars, to pay the contingent expenses of the survey and work required by this Act, and the Treasurer is directed to pay the same. The Controller is also hereby directed to draw his warrant, payable out of the balance of said five thousand dollars so appropriated and set apart, in favor of such person or persons as the State Board of Examiners may certify have claims under the provisions of this Act, and the Treasurer is hereby directed to pay the same.

SEC. 7. All the property purchased for this survey and work, and remaining on hand at its completion, shall be sold at public auction under direction of the Surveyor-General, and the proceeds thereof paid into the State Treasury.

SEC. 8. It is hereby made the duty of the Governor to forward a copy of this Act to the Governor of Nevada, and with it a request that the Governor of that State appoint some suitable person or persons of and for that State, to accompany and act in conjunction with the Surveyor-General of this State in correcting and establishing said eastern boundary; *provided*, that the State of Nevada shall pay all expenses of such person or persons so appointed.

SEC. 9. All Acts or parts of Acts inconsistent with the provisions of this Act are hereby repealed.

SEC. 10. This Act shall take effect on and after its passage.

In order to carry out the provisions of the Act of February 26, 1889, "for the correction and establishment of a portion of the eastern boundary line of the State of California," etc., on May 7, 1889, I made the following appointments and issued the instructions contained therein:

C. E. GRUNSKY and WM. MINTO, *Civil Engineers*:

GENTLEMEN: Whereas, the last Legislature of this State passed an Act to provide for the correction and establishment of a portion of the eastern boundary line of this State (see Statutes 1889, page 38, also copy of said Act, inclosed herewith), and in order to carry out the intent of said Act, you are hereby appointed to make such surveys as you may deem necessary and act under the following instructions:

In making the survey of the State boundary line southeastward from Lake Tahoe, you will, so far as practicable, make the latitude and longitude as established by the United States Coast and Geodetic Survey the basis of your work. Connect your triangulation system, which will be necessary to fix the point at which the State boundary line intersects the southeastern shore of Lake Tahoe, with the United States Coast and Geodetic Survey Station at Round Top, and with other points if convenient, and determine the error, if any there be, in the position of the State boundary line at Lake Tahoe. Should you find that the boundary line, as marked in the field by A. W. von Schmidt, in 1873, varies to any considerable extent from the intended position of the State boundary, you

will then proceed to the point where the boundary line intersects Colorado River, and by proper connection with the nearest available point at which latitude and longitude have already been determined, you will establish its geographical position, and make the same the basis of the necessary calculation of the azimuth of the State boundary line southeastward from Lake Tahoe.

When this is done, you will proceed with the survey of the boundary line in conformity with law above cited.

You will consult with Prof. Geo. Davidson for advice concerning methods to pursue in using and connecting with the work of the United States Coast and Geodetic Survey.

You will keep an accurate account of all expenses which are chargeable against the appropriation named in the Act, and when practical, take receipts for all sums of money expended by you on this work.

Your compensation shall be \$20 per day each and necessary expenses while engaged in field operations.

When the work is completed, you will make a full report to this office.

I am, gentlemen, respectfully, your obedient servant.

THEO. REICHERT,
Surveyor-General.

Their report will be found on pages 14-40.

The total expense of making this survey and all work connected therewith was \$4,876 33, for all of which vouchers have been filed and all claims paid.

Respectfully submitted.

THEO. REICHERT,
Surveyor-General and ex officio Register State Land Office.

REPORT OF THE CIVIL ENGINEERS ON THE STATE BOUNDARY LINE.

To Hon. THEO. REICHEBT, Surveyor-General of California:

DEAR SIR: The boundary of the State of California, as defined in the Constitution of California of 1849, and in that of 1879, is as follows: "Commencing at the point of intersection of the forty-second degree of north latitude with the one hundred and twentieth degree of longitude west from Greenwich, and running south on the line of said one hundred and twentieth degree of west longitude until it intersects the thirty-ninth degree of north latitude; thence running in a straight line, in a southeasterly direction, to the River Colorado, at a point where it intersects the thirty-fifth degree of north latitude; thence down the middle of the channel of said river to the boundary line between the United States and Mexico, as established by the treaty of May thirtieth, one thousand eight hundred and forty-eight; thence running west and along said boundary line to the Pacific Ocean, and extending therein three English miles; thence running in a northwesterly direction, and following the Pacific Coast to the forty-second degree of north latitude; thence on the line of said forty-second degree of north latitude to the place of beginning. Also including all the islands, harbors, and bays along and adjacent to the coast."

Astronomical observations and surveys were at various times made for the purpose of establishing the position of the eastern boundary of California at certain points, before an appropriation was made by Congress for a continuous survey of this part of the boundary line of the State.

As early as 1863 Butler Ives, representing Nevada, and J. F. Houghton, representing California, made a survey of the State line from Lake Bigler (Tahoe) to the northeast corner of California. Granite monuments were at this time set on the southern and northern shores of Lake Bigler.

About the same time Lieutenant Ives made a determination of the point where the line southeastward from Lake Bigler intersects the Colorado River, and established the longitude of this point approximately at $114^{\circ} 36' 00''$ west from Greenwich.

D. G. Majors, about 1868, set a monument at the supposed intersection of the 42d degree of north latitude with the 120th degree of longitude west from Greenwich.

Col. Robert Williamson, about 1868, set a monument supposed to be on the State boundary, near Verdi, some twenty miles north of Lake Bigler.

A continuous survey of the eastern boundary of California, from the northeast corner of the State to the Colorado River, was commenced in 1872, in which year the general appropriation bill placed \$41,250 at the disposal of the Department of the Interior for this work. A. W. von Schmidt was placed in charge of this survey, and it was completed in

1873. The most important astronomical work—the determination of the latitude and longitude at Verdi—was intrusted to Prof. George Davidson, now in charge of the U. S. Coast and Geodetic Survey on the Pacific Coast.

The accuracy of Professor Davidson's work in connection with the von Schmidt boundary survey is attested to by the fact that the final latitude and longitude observations, made in 1889 under the direction of the U. S. Coast and Geodetic Survey, by Assistants R. A. Mar and C. H. Sinclair, for use in connection with this report, established results practically identical with those of the earlier work. The survey of that portion of the eastern boundary of California north of Lake Bigler was made by A. W. von Schmidt in 1872, and the line southeastward, from the lake to the Colorado River, was surveyed by him in 1873.

The random line, with which he reached Colorado River, intersected the 35th degree of north latitude about three miles too far east, and it is presumed that the monuments set on this random line were all changed to the position of the boundary line, at that time supposed by von Schmidt to be the correct line.

The initial point of the von Schmidt survey was the observatory station occupied by Prof. George Davidson at Verdi in 1872. From this point the position of the 120th degree of longitude west from Greenwich was established, and thence the meridian line was extended northward to the 42d degree of north latitude, and southward to Lake Bigler. The accuracy of the work along this part of the boundary of the State has never before been brought into question, but the results of our work, as hereinafter shown, indicate that, although the point near Verdi was correctly established, the line marked by monuments as the boundary is one thousand six hundred and nine feet too far west at the northern shore of the lake.

The point of intersection of the 120th degree of longitude west from Greenwich with the 39th degree of north latitude lies in Lake Bigler, about three miles from its southern shore. It was therefore necessary for von Schmidt to establish the point, where the line southeastward from this point in the lake intersects the lake shore, by triangulation. This was done, and the granite monument there set, as well as a large cottonwood post, at two hundred and eleven miles from Oregon, was found well preserved in June of last year. It was, however, learned from a resident of that vicinity, that the granite monument had, several years ago, been restored to a vertical position, after it had been nearly knocked out of place by some accident. That its position has not been materially changed was easily verified by us by connection with the bearing trees that are still standing.

No trouble was experienced in retracing the line of survey southeastward from the lake. We found the granite monument at the old Carson-Placerville road; also the mile stake at the post two hundred and twelve miles from the Oregon boundary. We also found the eight-inch pine tree marked on N.W. side, "O., 212 m. 53 ch. 21 lks.;" N.E. side, "Nev.;" S.W. side, "Cal.;" S.E. side, "1873"; still occupying the identical spot where, according to the von Schmidt field notes, he also set a cast-iron monument bearing the same lettering, and which tree was further identified as occupying the spot which the field notes assign to an iron monument by the bearing trees referred to in the notes, as follows:

Large fir tree, 40 inches diam., distant 88 links, bears N. 14° E., marked "B. T., Nev."

Another fir tree, 30 inches diam., distant 71 links, bears S. 80° W., marked "B. T., Cal."

A small fir, 12 inches diam., distant 68 links, bears S. $2^{\circ} 15'$ W., marked "B. T., Cal."

For the purpose of our triangulation work a signal was established at a point one foot southwest of the line of the von Schmidt survey, and forty-one feet northwest of the point where the iron monument should stand. This point is below referred to as point K.

On State Line Point at the northern lake shore we found the points referred to by von Schmidt as follows: At one hundred and ninety-one miles from the Oregon boundary a cast-iron monument, "eight feet long, twelve inches square at bottom, six inches square at top, two feet in the ground, set in with rock. Marked monument with raised letters cast thereon, as follows: N. side, 'Oregon, 191 miles'; W. side, 'California'; E. side, 'Nevada'; S. side, '1872; longitude, 120° west of Greenwich. A. W. von Schmidt, U. S. Astronomer and Surveyor.'"

At 3.50 chains farther south on the shore of the lake a pine tree twenty-four inches in diameter, marked on the N. side "O., 191 miles 3.50 chains"; W. side, "Cal."; E. side, "Nev."; S. side, "1872. L., 120° ."

Between this tree and the cast-iron monument on the same line we found a cut-granite monument three feet high, marked "Cal." on its west side, "Nev." on the east side, and "1872" (changed from 1863) on the south side.

The iron monument and the granite post are well preserved. The pine at the water's edge is also standing. The granite post is the same block of stone which was set by Surveyor-General Houghton in 1863, but it had originally been set at a point about three quarters of a mile farther west than that at which it now stands. The original figures 1863 have been changed to 1872. At the iron monument, above described, on State Line Point, a signal (H) was erected, in order that the position of this point might be determined by triangulation, and a definite determination of its latitude and longitude might be made in connection with our work southeastward from the lake.

At our request the Superintendent of the U. S. Coast and Geodetic Survey, through the courtesy of the Pacific Coast branch of this department, placed at our disposal the result of the triangulation work in California. It was found necessary, in order to insure the greatest possible accuracy for our work on the State line survey, to base all our latitude and longitude calculations on the latitude and longitude of the two primary triangulation stations of the U. S. Coast and Geodetic Survey, Mounts Lola and Round Top, of which the former is a peak about nine thousand two hundred and eighty feet high, some twenty miles northwest of Lake Bigler, while the latter is a still more prominent peak, ten thousand four hundred feet high, about nineteen miles south of the lake.

These points are fifty-six miles apart, and afford a most excellent base line for a system of triangles near the lake. In June of last year these points were occupied, but owing to unfavorable atmospheric conditions no satisfactory results were obtained, and it became necessary to await the purification of the atmosphere by the first storm of October to

accomplish what could not be done while the haze and smoke of the summer months interfered with the measurement of angles.

The azimuth of the line southeastward from Lake Bigler could not be determined without better information than that afforded by old surveys of the longitude of the point at which the 35th degree of north latitude intersects Colorado River, or rather the center of the river channel as it existed at the time that the von Schmidt survey was made. Following the instructions contained in our letter of appointment, application was therefore made to the Superintendent of the U. S. Coast and Geodetic Survey to establish the latitude and longitude of some point near The Needles. This, as also the verification of latitude and longitude near Verdi, was promptly done by the assistants of the department already named, and the meridian line at the astronomical station near The Needles was also carefully marked by them.

By means of a base line and a system of triangles the 35th degree of latitude was established in September, 1889, by William Minto, and connections were made with several of the reference points near the river, marked by von Schmidt in 1873. The longitude of the terminal point of the line southeastward from Lake Bigler, in the channel of Colorado River, as the river channel must have been in 1873, was found to be $114^{\circ} 38' 45''.30$. The river in 1889 was two miles farther east, but this recent position of the river channel should have no bearing upon the establishment of the terminal point of the line southeastward from Lake Bigler, although such a considerable change of the river from its former bed throws doubt upon the correct position of the boundary of California along the river near the 35th degree of north latitude.

Thus, in determining the boundary southward from the 35th degree, the question arises, should the channel of 1873 be followed, or should the southeasterly course of the boundary line from the north be extended to an intersection with the present river channel?

The boundary of California, from a point on the 39th degree of north latitude to a certain point on the 35th degree of latitude, is defined as a straight line. Without entering into a discussion of the properties of the line which traced on the earth's surface will most nearly conform to the requirement that the line be straight, it will suffice to consider the line between the two points a geodetic line, each element of which is a part of a great circle, and which, moreover, is the shortest line between the two points.

The azimuth of this line could not be computed until the latitude and longitude of its terminal points were determined. The longitude of the Colorado River end of the line was not known till September, 1889, and it was then found that the tables required in making a sufficiently accurate determination of this azimuth were not available without sending to Washington for them. It was not advisable, however, to delay our triangulation work at the lake, consequently it became necessary to mark in the field a random line with an approximate azimuth, and to leave the completion of the field work, and the correction of all monuments to the true position of the boundary line, until the spring of 1890.

The field work was completed on June twenty-second of this year.

In carrying out the work, as above indicated, triangulation stations and signals were established near Lake Bigler as follows:

- A. * Mt. Lola, Lat. $39^{\circ} 25' 53''.34$.
 Long. $120 21 55.50$.
 C. * Round Top, Lat. $33 39 43.64$.
 Long. $120 00 05.00$.
 B. Rose Knuckle.
 D. Freel's Peak.
 E. Rubicon Point.
 F. Observatory Point.
 G. Deadman's Point.
 H. State Line Point, Iron Monument.
 I. Polsoni Knob.
 J. Bdy. Monument, S.E. lake shore.
 K. Point near pine at 212 m. 53 chs.

In the quadrilateral ABCD, all angles, except the one from B to C at D, were measured. In each case four sets of six angles were measured, and the final result is based on the four readings of the two verniers, each representing the aggregate of twenty-four single angles:

Station.	OBSERVER.	Measured Angle.	Corrected for Station Error.	Spherical Excess and Error.	Plane Angle.
<i>Triangle ABC.</i>					
A	C. E. Grunsky.....	$40^{\circ} 20' 15''.0$	$40^{\circ} 20' 11''.9$	$-2''.6$	$40^{\circ} 20' 09''.3$
B	L. H. Taylor.....	$119 34 43.7$	$119 34 40.2$	-2.7	$119 34 37.5$
C	Wm. Minto.....	$20 05 15.0$	$20 05 15.8$	$+2.6$	$20 05 13.2$
<i>Triangle ADC.</i>					
A	C. E. Grunsky.....	$11 57 11.6$	$11 57 10.8$	-1.0	$11 57 09.8$
D	L. H. Taylor.....	$125 46 45.6$	$125 46 45.6$	-1.0	$125 46 44.6$
C	Wm. Minto.....	$42 16 07.5$	$42 16 06.6$	-1.0	$42 16 05.6$
<i>Triangle ABD.</i>					
A	C. E. Grunsky.....	$28 23 04.5$	$28 23 01.1$	-1.1	$28 23 00.0$
B	L. H. Taylor.....	$130 19 39.4$	$130 19 32.1$	-1.1	$130 19 31.0$
D	L. H. Taylor.....	$21 17 30.0$	$21 17 30.0$	-1.0	$21 17 29.0$
<i>Triangle BDC.</i>					
B	L. H. Taylor.....	$10 44 50.0$	$10 44 51.9$	$+0.6$	$10 44 52.5$
D	By addition.....	$147 04 15.6$	$147 04 15.6$	$+0.6$	$147 04 16.2$
C	Wm. Minto.....	$22 10 50.0$	$22 10 50.8$	$+0.5$	$22 10 51.3$

The distance from Mt. Lola to Round Top is 91038.53 metres (log. $91038.53=4.9592252$).*

By a system of approximation, without recourse to the method of least squares, it was found that the distance from Rose Knuckle to Freel's Peak (B to D) is 47064.2 metres (log. $BD=4.6726901$).

In the quadrilateral BDEF, the angles of two of the four triangles were measured and one angle in a third triangle. In each case two sets of six angles each were taken. A set of six being six angles with telescope direct and six angles with telescope reversed. In each case one set was measured from right to left and the other from left to right:

* See Rep. of U. S. Coast and Geodetic Survey, 1885, Appendix No. 9, page 467.

Station.	OBSERVER.	Measured Angle.	Correction Spherical Excess and Error.	Plane Angle.
<i>Triangle BED.</i>				
B	L. H. Taylor	25° 42' 22".5	+1".0	25° 42' 23".5
E	L. H. Taylor	117 04 48 .8	-0 .8	117 04 48 .0
D	L. H. Taylor	37 12 47 .5	+1 .0	37 12 48 .5
<i>Triangle BFD.</i>				
B	Not measured			50 44 25 .2
F	Not measured			115 12 14 .0
D	Not measured			14 03 20 .8
<i>Triangle BFE.</i>				
B	By difference	25 02 01 .9	-0 .2	25 02 01 .7
F	Wm. Minto	140 21 55 .0	-0 .3	140 21 54 .7
E	By difference	14 36 04 .6	-1 .0	14 36 03 .6
<i>Triangle DEF.</i>				
D	L. H. Taylor	23 09 31 .9	-4 .2	23 09 27 .7
E	L. H. Taylor	131 40 53 .4	-1 .8	131 40 51 .6
F	Wm. Minto	25 09 45 .0	-4 .3	25 09 40 .7

In this set of triangles we have already determined $BD=47064.2$ metres and $\log. BD=4.6726901$. By solving the foregoing triangles it is found that the line E to F, Rubicon Point to Observatory Point, has a length of 21206.9 metres ($\log. EF=4.3264778$).

In the remaining triangles, forming a part of our Lake Bigler triangulation system, angles were measured as follows, each result being based on two sets of four angles each:

Station.	OBSERVER.	Measured Angle.	Correction.	Plane Angle.
<i>Triangle EGF.</i>				
E	L. H. Taylor	44° 14' 59"	-8."	44° 14' 51"
G	C. E. Grunsky	79 15 52	-9.	79 15 43
F	Wm. Minto	56 29 34	-8.	56 29 26
<i>Triangle EIG.</i>				
E	L. H. Taylor	50 30 11	0	50 30 11
I	L. H. Taylor	84 38 26	0	84 38 26
G	C. E. Grunsky	44 51 23	0	44 51 23
<i>Triangle FHG.</i>				
F	Wm. Minto	61 33 04	-4.	61 33 00
H	Wm. Minto	83 07 03	-3.	83 07 00
G	C. E. Grunsky	35 20 03	-3.	35 20 00
<i>Triangle EIJ.</i>				
E	L. H. Taylor	13 07 45	+4.	13 07 49
I	L. H. Taylor	93 06 40	+4.	93 06 44
J	L. H. Taylor	73 45 23	+4.	73 45 27
<i>Triangle IJK.</i>				
I	Wm. Minto	22 06 10		*22 06 10
J	Wm. Minto	128 50 13		128 50 13
K	By difference			29 03 37

In these quadrilaterals and triangles, ordinary methods of calculation established the lengths of triangle sides, and these in turn are made the basis of the calculation of the distances CH and CJ. With due regard to the corrections due to spherical excess, the azimuths of the lines C to

* Doubtful.

H and C to J could then be determined, and the latitude and longitude of the two points H and J were established.

The lengths of triangle sides were found to be as follows:

*AC=91038.5 metres; log. AC=4.9592251.
BD=47064.2 metres; log. BD=4.6726901.
AD=75480.2 metres; log. AD=4.8778330.
AB=35950.0 metres; log. AB=4.5556995.
CD=23241.5 metres; log. CD=4.3662642.
EF=21206.9 metres; log. EF=4.3264755.
CB=67752.3 metres; log. CB=4.8309242.
BE=31967.8 metres; log. BE=4.5047122.
DE=22928.0 metres; log. DE=4.3603660.
BF=12633.2 metres; log. BF=4.1015143.
DF=40275.8 metres; log. DF=4.6050442.
EG=17997.3 metres; log. EG=4.2552069.
FG=15061.0 metres; log. FG=4.1778532.
EI=12749.8 metres; log. EI=4.1055034.
FH= 8773.5 metres; log. FH=3.9431723.
CH=62152.3 metres; log. CH=4.7934574.
EJ=13260.2 metres; log. EJ=4.1225516.
CJ=33007.9 metres; log. CJ=4.5186181.
GH=13338.3 metres; log. GH=4.1250989.
GI=13948.7 metres; log. GI=4.1445348.

The azimuth from C to H is found to be $179^{\circ} 37' 31''.3$; and the azimuth from C to J is $187^{\circ} 30' 21''.6$.

The latitude and longitude of C (Mt. Round Top) being known, a determination of the latitude and longitude of the two boundary monuments at H and J, respectively, was made in the usual way, as prescribed by the U. S. Coast and Geodetic Survey, with the following result:

H. Iron bdy. monument on State Line Point—

Latitude $39^{\circ} 13' 19''.30$.

Longitude $120^{\circ} 00' 20''.45$.

J. Granite bdy. monument on southeast lake shore—

Latitude $38^{\circ} 57' 25''.06$.

Longitude $119^{\circ} 57' 05''.90$.

The azimuth of the State boundary line, southeastward from the intersection of the 39th degree of north latitude with the 120th degree of longitude, is $311^{\circ} 19' 36''.99$. (See appended letter of Chas. A. Schott.)

The longitude of the State line in latitude $38^{\circ} 57' 25''.06$, by calculation with this azimuth, is $119^{\circ} 56' 14''.33$; whereas, the von Schmidt boundary monument in this latitude has a longitude of $119^{\circ} 57' 05''.90$, as above noted, and is, therefore, $51''.57$, or four thousand and seventy-three and three tenths feet, west of the correct position of the boundary line point having the same latitude.

The fact was thus verified that the State boundary southeastward from Lake Bigler is incorrectly marked in the field, and that the boundary line monuments should be moved about three quarters of a mile farther east. But this is not all. The boundary line monuments on the northern shore of the lake are not in longitude 120° west of Greenwich, but in longitude $120^{\circ} 00' 20''.45$. (The iron monument on State Line Point, Station H, is in latitude $39^{\circ} 13' 19''.30$ and in longitude $120^{\circ} 00' 20''.45$, as above noted.) They are $20''.45$, or one thousand six hundred and nine feet, too far west, and do not properly mark the boundary between California and Nevada.

* From U. S. Coast and Geodetic Survey. The distance between two primary triangulation stations.

Having, as above set forth, ascertained the longitude of a point on the State line in the same latitude as the granite monument on the southeastern lake shore, the survey was continued from this granite monument, as follows:

N. $89^{\circ} 59' 43''.79$ E.

2,465 feet, cross old stage road Carson to Placerville N.E. and S.W.

4,073.3 feet to a point (J') on State boundary line in the same latitude as the granite monument on the lake shore (J).

Set a pine post, 50 inches by 5 inches by 5 inches, marked "CAL." on S.W. face, "NEV." on N.E. face, and "4 m. 39.64 chs." on N.W. face, from which a pine tree, 30 inches in diameter, marked "B. T.," bears N. 71° E., 101 feet distant; a pine stump, 48 inches diameter, bears N. $74\frac{1}{2}^{\circ}$ W., 19 feet distant. Made a stone mound around post. Thence on the boundary line with an azimuth of $131^{\circ} 21' 58''.94$ toward Lake Tahoe.

19.10 chains, old stage road Carson to Placerville; course N.E.

69.66 chains, small creek from the east.

70.46 chains, to shore of Lake Tahoe, bearing north and south.

Set a tamarack post, 50 inches by 6 inches by 6 inches, marked "CAL." on S.W. face, "NEV." on N.E. face, and "3 m. 49 chs." (distance from point O in lake) on N.W. face, from which:

A pitch pine, 28 inches diameter, bears N. $3\frac{3}{4}^{\circ}$ W., 41 feet distant; marked "B. T."

A pitch pine, 44 inches diameter, bears S. $28\frac{1}{2}^{\circ}$ E., 62 feet distant; marked "B. T."

A post set by U. S. G. surveyors, marked "B. M. No. 2, 3169 T. 7," bears N. $22\frac{1}{4}^{\circ}$ W., 79.1 feet distant.

From the point J', which point is on the State boundary line, and 4 miles 39.64 chains distant from the point O in the lake, where the 39th parallel of north latitude is intersected by the 120th degree of longitude west from Greenwich, the survey of the State boundary line was continued in the direction toward the intersection of the 35th parallel of latitude with Colorado River, as follows:

With the same azimuth above noted for this point, azimuth $311^{\circ} 21' 58''.94$, ascending steep mountain bearing N.E. and S.W., and noting all distances as though measured from the above named point O in Lake Tahoe.

6 miles 20.80 chains, crest of mountain, course west; thence along S.W. slope of timbered mountain.

6 miles 59.00 chains, cross sag in mountain ridge bearing N. and S., and along east slope of mountain.

7 miles 43.50 chains, spur sloping N.E., descent abrupt, broken, and precipitous. East slope of Sierra Nevada.

Set a flag on spur and from a point on line at the foot of the mountain, in west side of Carson Valley, measure at right angles to N.E. 93.40 chains to a point at which included angle between base and flag on spur is $74^{\circ} 44'$.

Log. tang. $74^{\circ} 44'$	10.5639267
Log. base 93 40	1.9703469

Log. dist. from flag to W. end of base	12.5342736
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Dist. from flag to W. end of base, 342.20 chains.

11 miles 65.70 chains, west end of base, or point in Carson Valley. At western edge of same set a pine post, 50 inches by 5 inches by 5 inches, marked "CAL." on S.W. face, "NEV." on N.E. face, and "11 m. 66 chs." on N.W. face.

Made a stone mound around post.

This point is in lat. $38^{\circ} 53' 12''.37$; long. $119^{\circ} 50' 06''.99$; and the azimuth of the State boundary line is here $311^{\circ} 25' 49''.72$.

13 miles 11.00 chains, Dilucki's, 95 feet to left.

13 miles 17.97 chains, road from Carson to Woodford's; course S. 25° E.

13 miles 53.90 chains, same road; course N.E.

13 miles 70.40 chains, set a cedar post, 55 inches by 7 inches by 5 inches, marked "CAL." on the S.W. face, "NEV." on N.E. face, and "13 m. 70 chains" on N.W. face.

Made mound of stone and earth around post with pits to N.E. and S.W.

Sprague's barn bears N. 38° W., 5 chains distant.

A small house (Sprague's) bears N. 55° W., 8.50 chains distant.

14 miles 50.40 chains, von Schmidt's granite monument, marked on N.W. face, "O., 221 m. 76 chs.", is at right angles to the S.W., and 2,748.7 feet distant.

15 miles 6.00 chains, set a trap rock, 25 inches by 12 inches by 12 inches, marked "C." on S.W. face, and "N." on N.E. face.

Made a stone mound around the same.

Baldwin's house bears S. $15\frac{1}{2}^{\circ}$ E., 8 chains distant.

15 miles 10.30 chains, Carson and Woodford road, course S.W.

15 miles 55.00 chains, Tillman's house, to right about 20 chains.

16 miles 64.00 chains, set a granite stone, 20 inches by 12 inches by 7 inches, marked "C." on S.W. face, "N." on N.E. face.

Made a stone mound around the same.

Joe Dilucki's house bears S. 38° E., about 12 chains distant.

This point is in latitude $38^{\circ} 50' 05''.40$, longitude $119^{\circ} 45' 57''.84$; and the azimuth of the State boundary line at this point is $311^{\circ} 28' 26''.06$.

16 miles 77 chains, West Fork of Carson River, 30 feet wide, runs N. 20° E. Beyond which this survey could not be extended owing to lack of the necessary funds.

Referring to the survey made in September, 1889, by William Minto, assisted by L. H. Taylor, at Colorado River, for the purpose of ascertaining with precision the longitude of the point where the center line of Colorado River was intersected at the time of the von Schmidt survey, in 1873, by the 35th degree of north latitude, Mr. Minto reports as follows:

"The work of determining the longitude of the intersection of the middle of Colorado River with the 35th degree of north latitude was very much simplified by the action of the U. S. Coast and Geodetic Survey. Prof. George Davidson, in charge of that work on the Pacific Coast, having, for the purpose of facilitating our observations, sent Assistants Mar and Sinclair to determine the latitude and longitude of The Needles, on the Atlantic and Pacific Railroad, at a date considerably earlier than had been intended, and at a very unfavorable as well as uncomfortable season in that climate. The point thus established is about ten miles south of the 35th degree of north latitude, and, accord-

ing to the results kindly furnished by Professor Davidson, is in latitude $34^{\circ} 50' 18''$.17, and longitude $114^{\circ} 36' 11''$.04 west from Greenwich.

"Messrs. Mar and Sinclair also marked the meridian line from their longitude pier to a point of the mesa on the south, and about three hundred metres distant.

"In September, 1889, the Coast and Geodetic Survey Station thus established was connected by a system of triangulation with the monuments established by Col. A. W. von Schmidt on the 35th parallel of north latitude, as determined by him in running the State boundary in 1873. The von Schmidt monuments found standing were the two posts designated in his field notes as being on the line of the 35th degree of latitude—one on the bluff west of the river, and 20.76 chains west of his intersection of the middle of the river by the said parallel of latitude, and the other 23.00 chains farther west; both in mounds of stone and earth, and marked as described in his field notes. There is also a stone marked as the notes describe it—'L. 35° N.'—in the mound around the most easterly post.

"The cast-iron boundary monument, which is described in the von Schmidt field notes, no longer stands in its original position. That it was moved appears from the certified copy of a letter from W. A. Salisbury to the Surveyor-General of Nevada, of which a copy is appended to this report. It is now apparently a little north of its original location.

"The triangulation work was carried up on the west side of the Colorado River, the difficulty of making frequent crossings of the stream with the facilities at our disposal rendering it impracticable to extend the triangulation work across the river.

"The meridian line of the Coast and Geodetic Survey Station was extended from the longitude pier north to the southwest bank of the Colorado River, crossing the Atlantic and Pacific Railroad near the eastern end of a tangent extending northwesterly. Along this straight stretch of railroad a base line, 3,449.98 feet long (1,051.56 metres), was measured, and a system of nine triangles was marked out, connecting this base line with the post set by von Schmidt on the west bank of Colorado River, on his supposed 35th parallel of north latitude.

"The distance from the longitude pier to the intersection of the meridian line with the south rail of the railroad was carefully measured, giving an average result of 1,035.8 feet (315.8 metres).

"The stations were lettered as indicated on the maps accompanying this report.

"Angles were measured and corrected as follows:

STATION.	Measured Angle.	Corrected Angle.	STATION.	Measured Angle.	Corrected Angle.
<i>Triangle ABC.</i>			<i>Triangle BCD.</i>		
A -----	50° 59' 40"	50° 59' 43"	B -----	66° 41' 50"	66° 41' 48"
B -----	71 24 00	71 24 04	C -----	81 35 30	81 35 28
C -----	48 36 10	48 10 13	D -----	31 42 45	31 42 44
<i>Triangle CDE.</i>			<i>Triangle DEF.</i>		
C -----	40 07 00	40 06 54	D -----	49 59 00	49 58 57
D -----	95 43 20	95 43 12	E -----	89 42 00	89 41 56
E -----	44 10 00	44 09 54	F -----	40 19 10	40 19 07
<i>Triangle EFG.</i>			<i>Triangle GFI.</i>		
E -----	68 35 00	68 35 03	G -----	41 47 00	41 46 57
F -----	78 25 20	71 25 24	F -----	115 06 40	115 06 38
G -----	39 59 30	39 59 33	I -----	23 06 30	23 06 27
<i>Triangle GHI.</i>			<i>Triangle HIJ.</i>		
G -----	26 20 00	26 19 57	H -----	121 45 00	121 45 03
H -----	104 52 20	104 52 16	I -----	26 17 13	26 17 15
I -----	48 47 50	48 47 47	J -----	31 57 40	31 57 40
<i>Triangle IJN.</i>			<i>Triangle OMN.</i>		
I -----	67 03 20	67 03 23	O -----	28 15 00	28 15 00
J -----	86 32 30	86 32 34	M -----	80 58 00	80 58 00
N -----	26 24 00	26 24 03	N -----	70 47 00	70 47 00
<i>Triangle NPO.</i>			<i>Triangle OJN.</i>		
N -----	13 08 50	13 08 50	O -----	24 22 00	24 22 00
P -----	70 31 35	70 31 35	J -----	122 49 00	122 49 00
O -----	96 19 35	96 19 35	N -----	142 49 00	142 49 00

"Station X is the U. S. Coast and Geodetic Survey Station, Needles. (Longitude Pier.)

"Station A is the east end of the base.

"Station C is the west end of the base.

"Station B is in the meridian through A.

"Station M is von Schmidt's post on supposed 35th parallel.

"Station N is von Schmidt's post on supposed 35th parallel.

"Station Q is iron boundary monument (present position).

"Station L is von Schmidt's intersection of supposed 35th parallel with Colorado River.

"Station L' is the intersection of the 35th degree of latitude and the middle of Colorado River, as the river was found by von Schmidt in 1873.

"Station P is the flagstaff on Camp Mojave.

"Station O is a point near the flagstaff.

"By a solution of the foregoing triangles the following results were obtained:

Measured AC=1051.56 metres, and XA=315.8 metres.

Log. AC=3.0218341.

Log. BC=2.9826393.

Log. BD=3.2572460.

Log. CE=3.3797524.

Log. DF=3.3800888.

Log. FI=3.6550468.

Log. HI=3.4500271.

Log. IJ=3.6558778.

Log. JN=3.9720686.

Log. NQ=2.984725.

Log. NO=3.702591.

Log. AB=2.9202788.

Log. CD=3.2249829.

Log. DE=3.1910244.

Log. EF=3.2642375.

Log. FG=3.4251665.

Log. GI=3.7882599.

Log. GH=3.6795074.

Log. HJ=3.3725645.

Log. IN=4.0070702.

Log. NP=3.725521.

Log. JO=4.137868.

Log. OP=3.085068, or OP=1,216.4 metres.

"The line OP was measured as a check on this work, and was found to be 1,215.8 metres long.

"The reductions to latitude and longitude were made according to the U. S. Coast and Geodetic Survey methods, and the detail of the reduction work is omitted.

"Station N was found to be in latitude $35^{\circ} 00' 23''.39$, and in longitude $114^{\circ} 39' 23''.61$, and the terminal point L of the von Schmidt boundary survey of 1873 is in latitude $35^{\circ} 00' 23''.39$, and in longitude $114^{\circ} 39' 07''.08$.

"Incidentally the latitude and longitude of the flagstaff at Camp Mojave was also established by this work, as follows: Latitude $35^{\circ} 02' 39''.22$, and longitude $114^{\circ} 37' 14''.48$.

"As nearly as could be determined from the von Schmidt surveys of 1873, Colorado River from L to L' had a southeasterly course, and this course, as nearly as it could be determined, was made the basis of the computation of the longitude of the intersection of the 35th degree of latitude with the center line of Colorado River in its position of 1873. The latitude $35^{\circ} 00' 23''.39$, and longitude $114^{\circ} 39' 07''.08$ of the point L, with an azimuth $322^{\circ} 32' 25''.65$ from L to L', the latitude of L' being $35^{\circ} 00' 00''$, established the longitude of L' at $114^{\circ} 38' 45''.30$, and the distance from L to L' was found to be 907.97 metres.

"The boundary line from Lake Bigler southeastward to Colorado River must, therefore, connect a point in latitude $39^{\circ} 00' 00''$, longitude $120^{\circ} 00' 00''$, with a point at Colorado River in latitude $35^{\circ} 00' 00''$ and longitude $114^{\circ} 38' 45''.30$.

"From Colonel von Schmidt it was learned before the above field work was undertaken that he was directed by the department in authority to make the center line of the Colorado River, as he found it in 1873, the objective point of his survey, and not the river as it might have been at the date of the admission of California. It was for this reason that L' was established as above noted. The correct azimuth of the boundary line northwestward from the point L' is $134^{\circ} 33' 09''.29$, and this line, which the above work indicates as the correct position of the State boundary, passes about four hundred and fourteen feet to the southwest of the von Schmidt terminal point L.

"The iron monument O now stands in latitude $35^{\circ} 00' 52''.91$ and longitude $114^{\circ} 39' 36''.14$, and is one thousand two hundred and sixty-four feet due east of the correct position of the State line.

"The field work at Colorado River was done under somewhat unfavorable conditions. The heat was intense, except for two days, when there was a heavy north wind, filling the air with dust and sand. Transportation facilities were particularly unsatisfactory. Acknowledgments in connection with this work are due to Captain Bowman, commanding at Camp Mojave, who placed the Government boat at our disposal and kindly rendered us all the assistance in his power. We are also under obligations to Mr. W. S. Hancock, Master Mechanic of Atlantic and Pacific Railroad at The Needles, and to Messrs. Monahan and Murphy, of the same place, for assistance and courtesies extended."

As soon as the results of the work at Colorado River became available, a calculation of the azimuth and length of the line from the point in Lake Bigler to Colorado River was made, at our request, and for our use, by Chas. A. Schott, of the U. S. Coast and Geodetic Survey, and reported by him as follows, under date of January 6, 1890:

Azimuth from Lake Bigler end of line to the Colorado River end, $311^{\circ} 19' 36''.99$. Distance, 651,056 metres=404.551 miles.

Azimuth from the Colorado River end of the line to the Lake Bigler end, $134^{\circ} 33' 09''.29$.

The limited appropriation available for the purpose of making the State line survey, precluded the possibility of marking more than a few miles of the line southeastward from the lake with stakes in mounds of stones. This work could not be extended farther than across the western portion of Carson Valley, as shown by the notes above recorded and the map accompanying this report.

Three copies each of two maps are filed herewith, and made a part of this report, as follows:

Sheet No. 1.—“State boundary survey. Map of the boundary line of California near Lake Bigler, showing position of the U. S. Coast and Geodetic Survey primary stations, Lola and Round Top, and the triangulation work of June and October, 1889, also the boundary line as surveyed and marked in the field by A. W. von Schmidt in 1872 and 1873, and the position of the boundary line southeastward from the lake, as surveyed by C. E. Grunsky and William Minto in 1889 and 1890, under instructions from Theo. Reichert, State Surveyor-General.”

Sheet No. 2.—“State boundary survey. Map of the boundary line of California at the intersection of the 35th degree of north latitude with Colorado River, showing position of the U. S. Coast and Geodetic Survey station, Needles, and the triangulation work of William Minto in September, 1889, done under instructions from Theo. Reichert, State Surveyor-General.”

We append to this report:

1. Letter of appointment and instructions.
2. Latitude and longitude determination at Verdi, by Chas. A. Schott.
3. Azimuth and length of State boundary line, Lake Tahoe to Colorado River. Letter of Chas. A. Schott.
4. The iron monument at Colorado River. Letter of W. H. Sailsbury.
5. A. W. von Schmidt survey, 1872 and 1873. Extracts from field notes.

We have to thank Superintendent T. C. Mendenhall, of the U. S. Coast and Geodetic Survey, for the kind assistance rendered us, and especially are our thanks due to Prof. George Davidson, in charge of the Pacific Coast division of this department, for advice and prompt response to our requests for reliable data.

We have also to acknowledge courtesies extended by Gov. C. C. Stevenson, of Nevada, and the interest taken in our work by Hon. Cyrus Coleman, of Markleeville, Alpine County, and to thank him for assistance rendered while the station Round Top was first occupied in June, 1889.

Our field work was completed, as far as possible, in November, 1889, but it was necessary to set temporary monuments on a random line, because the correct line could not be marked in the field until the computation memoranda were received from Washington late in January of this year, at which time the great depth of snow on the Sierra Nevada precluded the possibility of reaching the line at those points where permanent monuments have since been set.

Our work could not, therefore, be completed until after the melting of the snow in June, 1890, and it was not therefore possible to transmit the result of our work at an earlier date.

We have also to state that no outfit was purchased for use on the survey. Tents were kindly furnished us by Adjutant-General R. H. Orton, and all necessary instruments were furnished by us and our assistants. There is no property in our hands to be sold for the benefit of the State, as provided in the law authorizing this survey.

Respectfully submitted.

C. E. GRUNSKY,
WM. MINTO,
In charge of Survey.

SAN FRANCISCO, July 22, 1890.

LETTER OF APPOINTMENT AND INSTRUCTIONS.

OFFICE SURVEYOR-GENERAL, SACRAMENTO, May 7, 1889.

C. E. GRUNSKY and WILLIAM MINTO, *Civil Engineers*:

GENTLEMEN: Whereas, the Legislature of this State passed an Act to provide for the correction and establishment of a portion of the eastern boundary line of this State (see Statutes 1889, page 38, also copy of said Act inclosed herewith), and in order to carry out the intent of said Act, you are hereby appointed to make such surveys as you may deem necessary, and act under the following instructions:

In making the survey of the State boundary line southeastward from Lake Tahoe you will, so far as practicable, make the latitude and longitude as established by the U. S. Coast and Geodetic Survey the basis of your work. Connect your triangulation system, which will be necessary to fix the point at which the State boundary line intersects the southeastern shore of Lake Tahoe, with the U. S. Coast and Geodetic Survey station at Round Top, and with other U. S. Coast and Geodetic Survey stations if convenient, and determine the error, if any there be, in the position of the State boundary line at Lake Tahoe. Should you find that the boundary line, as marked in the field by A. W. von Schmidt in 1873, varies to any considerable extent from the intended position of the State boundary, you will then proceed to the point where the boundary line intersects Colorado River, and by proper connection with the nearest available point at which latitude and longitude have already been determined, you will establish its geographical position and make the same the basis of the necessary calculation of the azimuth of the State boundary line southeastward from Lake Tahoe.

When this is done, you will proceed with the survey of the boundary line in conformity of law above cited. You will consult with Prof. Geo. Davidson for advice concerning methods to pursue in using and connecting with the work of the U. S. Coast and Geodetic Survey. You will keep an accurate account of all expenses which are chargeable against the appropriation named in the Act, and, when practical, take receipts for all sums of money expended by you on this work.

Your compensation will be \$20 per day each, and necessary expenses while engaged in field operations.

When the work is completed, you will make a full report to this office.
I am, gentlemen, respectfully, your obedient servant,

THEO. REICHERT,
Surveyor-General.

LATITUDE AND LONGITUDE DETERMINATION OF VERDI.

EXTRACT FROM A REPORT OF CHAS. A. SCHOTT, ASSISTANT IN CHARGE
OF COMPUTING DIVISION U. S. COAST AND GEODETIC SURVEY.

Comparison of results for longitude in 1872, by George Davidson and S. R. Throckmorton, with the results of longitude in 1889, by C. H. Sinclair and R. A. Mar.

According to letter of C. H. Sinclair, the old triangular station Verdi Bluff is 246.51 metres south of transit, and 106.63 metres east of transit, hence:

Latitude of Verdi Bluff.....	39° 31' 05".11
246.51 metres.....	7.993
Latitude of transit 1889.....	39° 31' 13".103
Longitude of Verdi Bluff.....	119° 58' 46".81
106.63 metres.....	4.464
Longitude of transit 1889.....	119° 58' 51".274
	or, 7 ^h 59 ^m 55".418
From the Sinclair and Mar determination of 1889:	
Longitude difference—Sacramento and Verdi..	0 ^h 6 ^m 02".874
Longitude of Sacramento.....	8 05 58.29
Longitude of Verdi.....	7 ^h 59 ^m 55".416
	or, 119° 58' 51".240

Showing an almost perfect accord.

AZIMUTH AND LENGTH OF STATE BOUNDARY LINE, LAKE TAHOE TO COLORADO RIVER.

COMPUTING DIVISION, COAST AND GEODETIC SURVEY, }
January 6, 1890. }

Mr. B. A. COLONNA, Assistant in charge Office and Topography:

DEAR SIR: In response to the accompanying letter of Mr. Minto, of December 19, 1889, and referred to me, I have made the desired computation, and find the azimuth of the line from Lake Tahoe end to the

Colorado River end, $311^{\circ} 19' 36''.99$, according to the data given. In the absence of a definition of the line between the two given positions, I took it to be a geodetic line, *i. e.*, the shortest distance between the terminal points.

As it was but little more trouble to compute also the opposite azimuth—the distance and the azimuth for the two elliptic plane arcs—I give them also, *viz.*:

Azimuth of geodetic line from the Colorado River end to the Lake Tahoe end, $134^{\circ} 33' 09''.29$; distance between the termini, 651,056 metres, or 404.551 statute miles. Azimuth of elliptic arc at Tahoe end, $311^{\circ} 19' 36''.21$, and azimuth of elliptic arc at Colorado River end, $134^{\circ} 33' 08''.56$. *Vide* accompanying computation.

The two plane arcs when widest apart (about the middle of the line, say when two hundred miles out from either end) gap nearly 1.8 metres, or about six feet; here the geodetic passes about midway between them; it nowhere touches either arc; in fact it has not even the first element in common with them at the end points. A line of alignment touches the arcs at the termini, but it, like the geodetic, is a tortuous line. All of these connecting lines mentioned are practically of equal length, as it would take a magnifying glass to see the difference.

Yours respectfully,

CHAS. A. SCHOTT,
Assistant in charge Computing Division.

THE IRON MONUMENT AT COLORADO RIVER.

CORRESPONDENCE SHOWING THAT IT NO LONGER STANDS IN ITS ORIGINAL POSITION.

FORT MOJAVE, ARIZONA TERRITORY, March 17, 1890.

To Hon. SURVEYOR-GENERAL of the State of Nevada:

SIR: As the iron corner post between the State of Nevada and the State of California was washed over the bluff into the river by the last overflow of the Colorado River, and would surely have been lost in the next overflow, I went to work and hired ten Mojave Indians to get it out of the water and to dig a wagon road up to the bluff, and with my team hauled it up, and reset it again still farther back from the river, so it is safe now from an overflow.

As I have been at considerable expense and trouble to replace it, you will please do me the favor to write and let me know how to proceed in getting pay from the State for my trouble, and oblige yours, etc.,

W. H. SAILSBURY.

NOTE.—The above letter is contained in the report of the Surveyor-General and State Land Register of the State of Nevada for the years 1877 and 1878.

J. E. JONES,
Surveyor-General and State Land Register.

A. W. VON SCHMIDT SURVEY OF 1872 AND 1873.

EXTRACTS FROM FIELD NOTES.

Field notes and description of the monument established by me for the northeast corner of the State of California:

Having ascertained, from actual survey and measurement, that the 120th degree of longitude, as established by David G. Majors, U. S. Astronomer and Surveyor, at the 42d degree of north latitude, for the northeast corner of the State of California, at a distance of one hundred miles due south from said corner, viz.: at north latitude $40^{\circ} 33' 03''$, fell 3 miles 24 chains 51 links to the west of my flag line brought up from a point at Crystal Peak, which point I established by telegraph as the 120th degree of longitude west from Greenwich, I concluded to adopt my own line as the correct longitude.

I therefore made calculations for convergence of meridians between north latitude $40^{\circ} 33' 03''$ and north latitude 42° , and found the convergence for the difference of latitude of $1^{\circ} 26' 57''$ to be 5 chains 78 links.

From Majors' corner I therefore ran east, var. $18^{\circ} 37'$ east, 264 chains 51 links, less 5 chains 78 links, convergence of meridians in 100 miles, equal to 258 chains 73 links, or 3 miles 18 chains 73 links, at which point I established a large stone monument for the northeast corner of the State of California.

This monument is set in a core of juniper trees on the south bank of Twelve-Mile Creek, $1^{\circ} 20'$ south of edge of bluff, and a sketch thereof is here given.

The monument consists of a post 8 feet long and 8 inches square, marked on the north side, "O. Lat. 42° deg.;" east side, "Nevada;" south side, "1872. Longitude 120° deg.;" west side, "California." This post is solidly built into a stone mound $6\frac{1}{2}$ feet high with 8-foot base, and projects 3 feet from the mound.

Deposited a charred block 8 inches by 4 inches square, marked on its four sides, respectively, "Nevada," "California," "Long. 120° ," "Lat. 42° ."

No pits, too rocky. At the half height of the mound four large stones are inserted, the one facing to the south marked "1872. A. W. von Schmidt. Long. 120° , Lat. 42° ;" one facing west marked "C;" one facing to the north marked "O;" and the other, facing to the east, marked "N."

BEARINGS.

A juniper tree, 32 inches diam., bears N. $53^{\circ} 45'$ E., distant 80 links; marked tree "B. T., NEV."

A juniper tree, 12 inches diam., bears N. $85^{\circ} 35'$ E., distant 94 links; marked tree "B. T., NEV."

A juniper tree, 12 inches diam., bears S. $53^{\circ} 20'$ E., distant 62 links; marked tree "B. T., NEV."

A juniper tree, 40 inches diam., bears S. 70° W., distant 78 links; marked tree "B. T., CAL."

A juniper tree, 22 inches diam., bears N. $38^{\circ} 30'$ W., distant 35 links; marked tree "B. T., CAL."

Large single rock on summit of Mount Bidwell bears S. $75^{\circ} 05'$ W.

* * * * *

*South on 191st Mile.*Var. $16^{\circ} 30'$ East.

Ascend from post.

Chains.

- 4.00 Top of ascent and on ridge.
 19.00 Descend east slope of mountain.
 40.57 Cross trail, course east and west.
 80.00 Set a cast-iron monument of the following dimensions, viz.: 8 feet long, 12 inches square at the bottom, and 6 inches square at the top; 2 feet in the ground, and set in with rock. Marked monument with raised letters, cast thereon as follows, viz.: on north side, "Oregon, 191 miles"; on west side, "California"; on east side, "Nevada"; and on south side, "1872. Longitude 120° west of Greenwich. A. W. von Schmidt, U. S. Astronomer and Surveyor."

Deposited charred block marked "C. N."

Dug a circular trench around monument, 8 feet in diam. and 14 inches wide, throwing the earth out from the monument.

Made pits as per instructions. From which—

A pine tree, 30 inches diam., bears N. $66^{\circ} 40'$ W., distant 1 chain 20 links; marked tree "B. T., CAL."High pointed peak west of Lake Tahoe bears S. $57^{\circ} 45'$ W.A large pine tree, 32 inches diam., bears S. $60^{\circ} 30'$ W., distant 70 links; marked tree "B. T., CAL."

Blazed line throughout mile.

*South on 192d Mile.*Var. $16^{\circ} 15'$ East.

- 3.50 To a pine tree, 24 inches diameter, on the north edge of Lake Tahoe. Marked tree on north side, "O. 191 miles 3.50 chains"; west side, "CAL."; east side, "NEV."; and west side, "1872. L. 120° ."

The shores of the lake bear off east and west; a point, or reef of rocks, 15 chains west of this point, makes out a short distance into the lake, and is the division between Agate and Crystal Bays (so called).

The lake shore being at 191 miles 3 chains 50 links, and the intersection of the line with the 39th degree of north latitude being 206 miles 78 chains 45 links south of the initial point at the 42d degree of north latitude, the remaining portion of this line, namely, 15 miles 74 chains 95 links, falls into Lake Tahoe.

About three quarters of Lake Tahoe is in the State of California, and one quarter in the State of Nevada.

I proceeded to the field on the fifteenth of April, 1873, and continued survey of the eastern boundary of the State of California, commencing at the 191st mile-post, set near the north-erly shore of Lake Tahoe.

At the 191st mile-post, or monument, I took the following bearings:

Cave Rock, east side of Lake Tahoe, bears S. $14^{\circ} 24'$ E.

High Peak, south end of lake, bears S. $12^{\circ} 52'$ E.

High Rock Peak, west side of Lake Tahoe, bears S. $22^{\circ} 52'$ W.

High Peak, west side of Lake Valley, bears S. $12^{\circ} 46'$ W.

From the 191st mile-post I ran north on the 120th degree of west longitude.

Var. $16^{\circ} 30'$ E.

NORTH.
Chs. Lks.
6 70

To a point or elevation 200 feet above the level of the waters of the lake, which point I established as a fire signal station for triangulating across Lake Tahoe.

I also set up a large signal flag on top of a high mountain 13 chains due south of the 187th mile-post, to be used as a back sight in conjunction with the fire signal station.

From fire signal station at 191st mile-post I sighted a line due south on the 120th meridian, and found the same passed over a sharp mountain peak a long distance south of the south end of the lake, and also over a small snow patch on an open space between two trees on a small hill near the southerly shore.

Having procured the services of the steamer "Truckee," I proceeded across the lake in a direct line toward my objects on the southern end.

The day was very favorable for my operations, there was scarcely any current and not a breath of air stirring, so that I was enabled to keep my fore and back sights constantly in line.

On reaching the southern shore of the lake I set up a flag at point of landing.

I next proceeded to take observation of polaris on its greatest eastern elongation on the night of April 18, 1873, by field transit. Local mean time, $5^h 11^m 35^s$ A. M.; latitude, $38^{\circ} 56' 47''$.

Log. Cos. Decl. $88^{\circ} 37' 53'' = 8.37814$

Log. Cos. Lat. $38^{\circ} 56' 36'' = 9.89085$

Log. Sin. azimuth = 8.48729

Azimuth = $1^{\circ} 45' 35''.6$

Obs. by needle = $14^{\circ} 41' 30''.0$

E. E. - A. = 1 45 35 .6

$16^{\circ} 27' 05''.6 = \text{Var. east.}$

Having laid off the true meridian, I proceeded to observe my fire signals and flag at the northerly end of the lake, and found that by moving my position at the south end of the lake, two chains to the west from the flag set up at the point of landing, I was on the true 120th meridian.

I continued these observations for three days and nights in succession, using flag signals by day and fire signals by night, until I became satisfied I was on the true meridian as brought down from Verdi, where it had been established by telegraph, namely: the 120th degree of longitude west from Greenwich.

Finding the southerly shore of the lake at the 120th degree of west longitude to be wet, low, and swampy, unfit for an observatory station, I concluded to locate that place on higher ground, and at a more convenient place of access.

For this purpose, I therefore ran a line from the 120th degree of west longitude east on a course N. $89^{\circ} 58' 30''$ E., 77 chains and 55 links; thence north 13 chains and 25 links, where I set up blocks, mounted the meridian telescope and zenith sector thereon, and, after carefully adjusting the same, proceeded to take a series of observations for both latitude and longitude.

This Astronomical Station No. 1 is 77 chains 55 links east of the 120th degree of west longitude, or $120^{\circ} 00' 00''.0$

Less 1 04.7

Longitude = $119^{\circ} 58' 55''.3$

The latitude being $38^{\circ} 56' 45''$, difference in time, $0^h 00^m 04^s.32$. (See astronomical observations and notes of Station No. 1.)

I then proceeded to run the necessary base line for the purpose of triangulating the distance across Lake Tahoe, field notes of which are as follows, viz.:

Commenced at point on 120th degree of west longitude, at south end of Lake Tahoe, from which point—

Top of Cave Rock bears N. $22^{\circ} 52'$ E.

High peak bears S. $51^{\circ} 08'$ E.

High rock peak, west side of lake, bears N. $63^{\circ} 41'$ W.

High peak, Lake Valley, bears S. $64^{\circ} 30'$ W.

Butte Peak bears N. $43^{\circ} 13'$ E.

The shore of the lake bears off S.W., then turns to the N.W.

On the east side of line, the shore bears off N.E. for 10 chains, thence a little north of east.

To the south, low timber for the distance of a mile, then dense pine timber.

Land has but little rise for 4 or 5 miles, where the mountains rise abruptly to the N.E. and N.W.

From this point I ran due east, at right angles to the 120th degree of west longitude.

EAST.		Var. $16^{\circ} 24'$ E.
Chs.	Lks.	
63	13	Across marsh, enter pine timber.
77	84	Due south of observatory station; distant 13 chains 25 links.
80	60	From which—
		Rowland's Hall, south gable of house, bears N. $35^{\circ} 13'$ W.
		Mr. Caldwell's house and store bears N. $3^{\circ} 05'$ E.
88	80	From which—
		Mr. Rowland's house bears N. $52^{\circ} 55'$ W.
		Mr. Caldwell's house bears N. $16^{\circ} 39'$ W.
102	00	Rowland's Hall bears N. $66^{\circ} 37'$ W.
		Caldwell's house bears N. $41^{\circ} 26'$ W.
170	00	To wet meadow, sand.
178	00	To little water and flat.
189	00	Across same, fine grass.
218	52	From which—
		Included angle on fire signal, on north end of Lake Tahoe,
		is $82^{\circ} 04'$.

Nat. Tan. $82^{\circ} 04'$ = 7.1759437
 Multiplied by base, 218 chs. 52 lks.= 218.52

143518874
 358797185
 574075496
 71759437
 143518874

1568.087217324

Divided by 80 = 19 miles 48 chains 9 links, the distance from fire signal at north end of lake to point of triangulation at south end of lake.

	M.	Chs.	Lks.
Total distance triangulation	19	48	09
Less distance from fire signal station to 191st mile-post		6	70

Making 19 41 39
 Equal to 1,561 chains 39 links.

The distance from 39° of north latitude to latitude $38^{\circ} 56' 45''$ on the 120th degree of west longitude is $39^{\circ} 00' 00''$
 Less 38 56 45

• $00^{\circ} 03' 15''$

$3' 15''$ = 298 chains 89 links = 3 miles 58 chains 89 links.

Recapitulation.

	Chs.	Lks.	
Chained distance from 42d degree north latitude to 191st mile-post	15,380	00	
Distance across lake from 191st mile-post to point of triangulation	1,561	39	
Total from 42d degree north latitude to point of triangulation	16,841	39	
Deduct distance of observatory station (latitude $38^{\circ} 56' 45''$ N. of base line)	13	25	
	16,828	41	
Deduct difference between latitude 39° and latitude $38^{\circ} 56' 45''$ north ($3' 15''$)	298	89	
Total from 42d degree to 39th degree north latitude	16,529	25	
Equal to 206 miles 49 chains 25 links, the distance to the intersection of the 39th degree of north latitude with the 120th degree of longitude west from Greenwich.			
	M.	Chs.	Lks.
Calculated distance between the 42d and the 39th degree N. latitude is	206	78	$44\frac{1}{2}$
Measured distance	206	49	25
Difference	000	29	$19\frac{1}{2}$

I next proceeded to lay off azimuth of transit line, running in a southeasterly direction, from the 39th degree of north latitude, where it intersects the 120th degree of west longitude in Lake Tahoe, to where the 35th degree of north latitude intersects the middle of the channel of the Colorado River.

To do this it was necessary to know the longitude at the terminus of the Colorado River.

There being no telegraph facilities at that point, I concluded, for the time being, to assume the longitude of that place as

determined by Lieutenant Ives in 1863 (which was kindly furnished me by the late State Surveyor-General of California, J. F. Houghton, who had previously run this line south to the White Mountains), to run a line to Ives Point, then establish the intersection of the 35th degree of north latitude with the middle of the channel of the Colorado River, by a series of my own observations, correct my line back, should I find error in longitude, and mark and establish the true line in the field, all of which was done.

Longitude at the intersection of the 35th degree of north latitude with the middle of the channel of the Colorado River, as established by myself, is $114^{\circ} 37' 58''.50$. Ives' longitude for that point, $114^{\circ} 36' 00''$. The computations of both azimuth lines are herewith accompanying and referred to.

The initial point at the 39th degree of latitude falling in Lake Tahoe, where I could not set an instrument, it became necessary to find the azimuth line at some point on the line southeasterly thereof.

I therefore ran a line from the intersection of longitude $120^{\circ} 00' 00''$ with north latitude $38^{\circ} 56' 45''$, at the south end of lake, on a course $N. 89^{\circ} 58' 30'' E.$, a distance of 7,536 yards, or 342 chains $54\frac{1}{2}$ links, to a point on the azimuth line, which is 10,005 yards, or 454 chains 77.3 links, or 5 miles 54 chains 77 links, on the course $S. 48^{\circ} 45' 09'' E.$ from the intersection of the 120th degree of longitude west from Greenwich, which point is at latitude $38^{\circ} 56' 45''$ north, and longitude $119^{\circ} 55' 13''.6$, as per accompanying azimuth calculations.

At this point I set up temporary post.

Thence ran towards Lake Tahoe, $N. 48^{\circ} 51' 59'' W.$, 1 mile 57 chains 14 links, to the lake shore; the remaining distance to the initial corner in Lake Tahoe being 3 miles 77 chains 63 links.

At the lake shore I set a cut-granite monument, $10\frac{1}{2}$ inches square at the base, $8\frac{1}{2}$ inches at top, 6 feet long, 2 feet in the ground; marked same with cut letters on N.W. side, "O. 210 miles 76 chains 07 links"; S.E. side, "1873"; N.E. side, "NEV."; and S.W. side, "CAL."

Deposited charred block marked "C. N."; made mound of stone 8 feet diam., 3 feet high. From which—

A pine tree, 48 inches diam., distant 47 links, bears $S. 63^{\circ} 03' W.$; marked tree "B. T., CAL."

Another pine tree 30 inches diam., distant 174 links, bears $S. 22^{\circ} 45' W.$; marked tree, "B. T., CAL."

A large pine tree 6 feet diam., distant 1 chain 54 links, bears $N. 54^{\circ} E.$; marked tree, "B. T., NEV."

The line runs to the S.W. of Mr. Lapham's wharf.

The lake shore bears off N. and S.; a high rocky mountain peak bears $N. 77^{\circ} 45' W.$

Having completed all the requisite observations at Lake Tahoe, I next proceeded on my line south to the Colorado.

On 211th Mile.

Azimuth S. 48° 43' 05" E.; var. 16° 38' 42" E.

Chs. Lks.

- 80 00 Set a cottonwood post 10 inches square, 8 feet long, marked same on N.W. side, "O. 211 miles."; N.E. side, "NEV."; S.W. side, "CAL."; and S.E. side, "1873." Post set in low, wet ground; no mound.

On 212th Mile.

Azimuth S. 48° 42' 34" E.; var. 16° 38' 42" E.

- 27 48 Enter window of Mr. Lapham's house.
 28 63 Through house porch. Set wooden monument 8 inches square, 6 feet long, marked on N.E. side, "NEV."; S.W. side, "CAL."
 30 02 Set cut stone granite monument on southeast side of road leading to Carson and Virginia Cities. Monument 10½ inches square at base, 8½ inches square at top, and 6 feet long, set 2 feet in the ground. Marked same, N.W. side, "O. 211 miles 30 chains"; N.E. side, "NEV."; S.W. side, "CAL."; and S.E. side, "1873."

From which—

Large pine tree 50 inches diam., distant 40 links, bears N. 52° E.; marked tree, "B. T., NEV."

Another pine tree 24 inches diam., distant 1 chain 70 links, bears S. 36° 15' W.; marked tree, "B. T., CAL."

- 30 84 To corral fence N.E. and S.W. road; same course.
 35 00 Cross corral fence, bears S. 50° E.
 37 25 Pass 5 links N.E. of large pine tree 5 feet diam.; marked tree, "B. T., CAL."
 50 00 Commence ascending mountain; foothills bear off N.E. and S.W.
 70 10 Pass between the pines, each 3 links from line; that to the S.W., 30 inches diam., marked "CAL."; that to the N.E., 14 inches diam., marked "NEV."
 80 00 Set pine post 6 inches square, 7 feet long; marked same on N.W. side, "O. 212 miles"; N.E. side, "NEV."; S.W. side, "CAL."; and S.E. side, "1873"; made mound of stones 6 feet diam., 3 feet high. Deposited charred block marked "C. N." Made pits as per instructions.

From which—

A spruce tree, 12 inches diam., bears N. 71° 45' E., distant 26 links; marked tree, "B. T., NEV."

A pine tree bears S. 54° W., distant 92 links, 14 inches diam.; marked tree "B. T., CAL."

A pine tree, 26 inches diam., distant 77 links, bears S. 26° 15' E.; marked tree "B. T., NEV."

This mile runs through fine pine timber, with some spruce; soil sandy. Last one mile containing considerable quantity of granite bowlders. Land sloping to the N.W. Blazed line through timber.

On 213th Mile.

Azimuth S. 48° 42' 03" E.; var. 16° 38' E.

Chs. Lks.

13 00 Ascend gently.

30 00 Ascend steep mountain.

53 21 To point on Lat. 38° 56' 45", brought up from 120th degree of west longitude, where I perpetuated Observatory Station No. 1 by setting up cast-iron monument 8 feet long, 12 inches square at base, 6 inches at top, 2 feet in the ground, in rock mound 8 feet diam., 4 feet high. Raised letters cast on monument, as follows: N.W. side, "O. 212 miles 53 chains"; N.E. side, "NEV."; S.W. side, "CAL."; and S.E. side, "Lat. 38° 56' 45", Long. 119° 55' 13". 1873. A. W. von Schmidt, U. S. Astronomer and Surveyor."

Also marked pine tree, 8 inches diam., on N.W. side, "O. 212 miles 53 chains 21 links"; N.E. side, "NEV."; S.W. side "CAL."; and S.E. side, "1873."

Large fir tree, 46 inches diam., distant 88 links, bears N. 14° E.; marked tree "B. T., CAL."

Another fir tree, 30 inches diam., distant 71 links, bears S. 80° W.; marked tree "B. T., CAL."

Small fir tree, 12 inches diam., distant 68 links, bears S. 2° 15' W.; marked tree "B. T., CAL." This point is very prominent. The monument can be plainly seen.

80 00 Set pine post, 6 inches by 6 inches square, 7 feet long; marked same, N.W. side, "O. 213 miles"; N.E. side, "NEV."; S.W. side, "CAL."; and S.E. side, "1873."

Made mound of earth and stone 6 feet diam., 3 feet high. Deposited charred block marked "C. N.," and made pits as per instructions. Blazed line throughout.

* * * * *

On 610th Mile.

Azimuth S. 45° 31' 59" E.; mag. var. 14° 47' E.

80 00 Set cottonwood post, 6 feet by 6 inches by 6 inches, deposited charred block, and made mound of stone and earth 6 feet diam. and 3 feet high.

Black Peak bears S. 52° 38' W.; flagstaff, Camp Mojave, N. 75° 00' E.; my observatory station on random line, N. 79¼° E. Land slopes toward the east.

On 611th Mile.

Azimuth S. 45° 31' 22" E.; mag. var. 14° 45' E.

80 00 Set cottonwood post, 6 feet by 6 inches by 6 inches, marked "O. 611 miles." Made mound of stone and earth 6 feet diameter and 3 feet high.

Black Peak bears S. 62° 05' W.; flagstaff, Camp Mojave, bears N. 59° 15' E.; my observatory station bears N. 54° 15' E.

On 612th Mile.

Azimuth S. $45^{\circ} 31' 06''$ E.; mag. var. $14^{\circ} 45'$ E.

Chs. Lks.

- 22 37 Set cottonwood post, 6 feet by six inches by 6 inches, on a prominent point, marked "O. 611 m. 22 chs." Made a large mound 8 feet diameter, 3 feet high.

My observatory station bears N. $51^{\circ} 30'$ E.; flagstaff, Camp Mojave, bears N. $53^{\circ} 15'$ E.; Sharp Peak, east of Colorado River, S. $87^{\circ} 25'$ E.; Great Thumb bears S. $80^{\circ} 50'$ E.

- 59 87 To point selected for perpetuating Astronomical Station No. 5 on the Colorado River, and as witness to corner in same.

Set cast-iron monument 6 inches square at top, 12 inches square at base, 6 feet long, 2 feet in ground, with raised letters cast thereon, viz.: N.W. side, "O. 611 miles, 59 chains"; N.E. side, "NEV."; S.W. side, "CAL."; S.E. side, "1873. A. W. von Schmidt, U. S. Astronomer and Surveyor, witness to corner in river."

Deposited charred block; made mound of stone 8 feet diameter and 4 feet high.

Twenty (20) links from this monument, on the line to the southeast, I set a cottonwood post, 6 feet by 7 inches by 7 inches, marked "O. 611 miles 60 chains, etc.," from which flagstaff, Camp Mojave, bears N. $44^{\circ} 30'$ E.; my observatory station bears N. $39^{\circ} 43'$ E.; Black Peak bears N. $69^{\circ} 10'$ W.; High Peak bears N. $59^{\circ} 09'$ W. These two monuments are on a conspicuous point, with a view to durability, and are witnesses to the intersection of latitude 35° north with longitude $114^{\circ} 37' 53''.5$, at the middle of the channel of the Colorado River.

- 63 67 To right bank of the Colorado River, which at this point has a course S. $21\frac{1}{2}^{\circ}$ E. At a distance of 30 chains down stream it bears off S. $52^{\circ} 30'$ E. for about a mile; thence runs southerly. The remaining portion of the line, to wit: 41.29 chains to latitude 35° N., is in the river.

On 613th Mile.

- 29 96 To the intersection of north latitude 35° with middle of the channel of the Colorado River, at longitude $114^{\circ} 37' 53''.5$ west from Greenwich.

From north latitude 39° to the center of the channel of the Colorado River, at latitude 35° , the total measured distance is 405 miles 26.52 chains; calculated distance is 405 miles 5.73 chains; difference, 20.79 chains.

Total distance from Oregon to the Colorado River is 612 miles 24.96 chains.

Field Notes Connecting my Random Line with True Line at the Colorado River.

I found my observatory station on random line on right bank of the Colorado River to be in latitude $35^{\circ} 01' 53''.43$ north, longitude $114^{\circ} 36' 45''.45$ west from Greenwich. From which—

Flagstaff, Camp Mojave, bears N. $59^{\circ} 15'$ E.; Sharp Peak, east of Colorado River, bears N. $79^{\circ} 50'$ E.; Black Peak bears S. 60

30' W.; Rock, on straight edge on low mountain, bears N. 66° 19' W.; Great Thumb bears S. 73° 40' E.

From this point to reach latitude 35° N. at a point due south the difference is $0^{\circ}.01' 53''.43 = 173.75$ chains. I therefore ran as follows (var. 14° 45' E.):

West	17.46 chains; thence
South	20.28 chains to shore of Colorado River; thence
West	14.93 chains; thence
South	10.13 chains to river; thence
West	52.32 chains; thence
South	30.33 chains to river; thence
West	29.86 chains to a slough; thence
	34.55 chains across slough; thence
	44.13 chains to bluff; thence
South	113.01 chains to 35th degree north latitude.

Making the total from observatory station on random line, southing, 173.75 chains; westing, 128.74 chains.

At this point set a cottonwood post, 6 feet by 6 inches by 6 inches, marked on N. side, "1873"; S. side, "Lat. 35°"; E. side, "von Schmidt, U. S. Sur." Made mound of earth and stone 6 feet by 3 feet.

Flagstaff, Camp Mojave, bears N. 41° 41' E.; observatory station bears 36° 30' E.; Black Peak bears S. 72° 30' W.; High Peak, same range, bears N. 55° 18' W.

I then ran—

East	on 35th degree north latitude east 23 chains to point selected for triangulating across Colorado River, at which point I set cottonwood post, 7 feet by 7 inches by 7 inches, marked on N. side, "1873"; S. side, "Lat. 35°"; E. side, "von Schmidt, U. S. Survey."
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Made monument of stone 8 feet diam., 3 feet high; set a stone, 9 feet by 18 inches by 18 inches, on mound by side of post. Marked stone, "Lat. 35°—1873, U. S." Also deposited stone in mound, 5 inches square 12 inches long, marked "Lat. 35°". From which flagstaff, Camp Mojave, bears N. 38° 02' E.; my observatory station bears N. 29° 31' E.; a sharp-pointed rock east of Colorado River bears N. 89° 10' E.; Great Thumb bears S. 84° 40' E. This point and mound are on a prominent point, and can be seen from the river, and from all sides.

I then sent flag across the river and placed it on line on left bank. Then ran a base of 13 chains 85 links to the south.

Included angle on flag on left bank of river was 69° 01'.

$$\text{Nat. tang. } 69^{\circ} 01' = 2.6073558$$

13.85

130367790

208588464

78220674

26073558

36.111877830

Distance from point of triangulation to opposite bank of river, 36.11 chains.

From point of triangulation I then ran east on latitude 35° ; measuring from post there set:

East

24.00 chains to bluff, gravelly bank of river.

28.40 chains to right bank of river; course S.E.

Distance triangulated.....36.11 chains.

Deduct distance measured from post to bank... 5.40 chains.

Width of river.....30.71 chains.

One half of which is.....15.355 chains.

43.75½ chains to the center of the Colorado River, in latitude 35° north, which point is 84.985 chains west of my observatory station on random line. Making the longitude at intersection of 35° degree north latitude with middle of the Colorado River, $114^\circ 37' 53''.5$.

Having established that point, I next proceed to get my line out of the river, which I did in the following manner:

The flag remaining on the 35° degree north latitude, on left bank of river, I proceeded up stream on the right bank until I reached a point on line with the flag on left bank of river, having the same azimuth as my true line. From this point I ran a base at right angles to my true line to the S.W. 4 chains. Included angle on flag $86^\circ 43'$.

Nat. tang. $86^\circ 43' = 17.431385 \times 4 = 69.725540$.

Distance triangulated.....69.72 chains.

Continue northerly on same azimuth, parallel to true line12.87 chains.

Making total distance from flag.....82.59 chains.

I then ran—

West

parallel to 35° degree of latitude, 15.35½ chains (being half width of river), to true line and to post set for O., 611 miles 22.37 chains.

	M.	Chs.
Oregon to this point.....	611	22.37

From this point to 35° degree of latitude and middle of river.....	1	2.59
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Total distance.....	612	24.96
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Corrected Report of Spanish and Mexican Grants in California,

COMPLETE TO AUGUST 1, 1890.



GRANTS OF LAND IN CALIFORNIA MADE BY SPANISH OR MEXICAN AUTHORITIES.

No. on Gen'l L. O. Map.	NAME OF GRANT.	Confirinee.	Area.	Condition of Title.	Where Located.
124	Acalanes	Elam Brown	3,328.95	Patented May 18, 1858.	Contra Costa.
67	Agua Caliente, part of	C. P. Stone.	212.25	Patented May 7, 1880.	Sonoma.
67	Agua Caliente, part of	M. G. Vallejo.	1,864.23	Patented June 12, 1880.	Sonoma.
67	Agua Caliente, part of	T. M. Leavenworth.	591.87	Patented May 7, 1880.	Sonoma.
67	Agua Caliente, part of	Joseph Hooker.	550.86	Patented June 9, 1866.	Sonoma.
136	Agua Caliente, part of	F. Higuera.	9,563.87	Patented April 17, 1858.	Sonoma.
521	Agua Hedionda.	J. M. Marron	13,311.01	Patented December 12, 1872.	Alameda.
206	Agua Puerca y las Trancas	Rodriguez & Alviso.	4,421.52	Patented March 1, 1867.	San Diego.
13	Aguas Frias.	S. Todd.	26,761.40	Patented July 19, 1860.	Santa Cruz.
437	Aguaje de la Centinella	B. Abila.	2,219.26	Patented August 23, 1872.	Butte and Colusa.
282	Aguajito.	G. Tapia.	3,322.56	Patented March 19, 1868.	Los Angeles.
282	Aguajito.	M. Villagrana.	44.32	Not surveyed. Sent for patent August 26, 1882.	Monterey.
468	Alamitos, Los	A. Stearns	28,027.17	Patented August 29, 1874.	Santa Cruz.
358	Alamos, Los	J. A. de la Guerra.	48,803.38	Patented September 12, 1872.	Los Angeles.
346	Alamos (Los) y Agua Caliente	A. Olevara et al.	26,626.23	Patented November 9, 1866.	Santa Barbara.
265	Alisal, El	B. Bernal.	5,941.12	Patented August 9, 1866.	Kern.
267	Alisal, El	M. T. de la G. Hartnell.	2,971.26	Patented February 12, 1882.	Monterey.
216	Aptos	Rafael Castro.	6,685.91	Patented April 23, 1860.	Monterey.
242	Aromitas Las y Agua Caliente	F. A. McDougall et al.	8,659.69	Patented March 17, 1862.	Santa Cruz.
224	Animas, Las	Heirs of J. M. Sanchez.	26,518.68	Patented March 15, 1873.	San Benito and Santa Cruz.
133	Arroyo de la Alameda.	J. de J. Vallejo.	17,705.38	Patented January 1, 1858.	Santa Clara.
540	Arroyo de la Laguna.	J. & S. Williams.	4,418.10	Patented February 20, 1882.	Alameda.
115	Arroyo de las Nueces y Bollones.	Heirs of J. S. de Pacheco.	17,782.48	Patented April 18, 1866.	Santa Cruz.
169	Arroyo de los Pilarcitos or Miramontes.	J. C. Miramontes.	4,424.11	Patented February 20, 1882.	Contra Costa.
214	Arroyo del Rodeo.	Hames & Daubenbass.	1,473.07	Patented May 3, 1882.	San Mateo.
9	Arroyo Chico	John Bidwell.	22,214.47	Patented April 4, 1860.	Santa Cruz.
	Arroyo de San Antonio	T. B. Valentine.	13,316.00	Sold as public land but settled by issuance of Valentine script.	Butte.
339	Arroyo Grande.	F. Branch.	4,437.29	Patented April 10, 1867.	Sonoma.
297	Arroyo Seco.	J. de la Torre.	16,523.35	Patented June 30, 1859.	San Luis Obispo.
39	Arroyo Seco.	Andros Pico.	48,857.52	Patented August 29, 1863.	Monterey.
318	Assuncion.	P. Estrada.	39,224.81	Patented March 22, 1866.	Anador, Sac to, and San Joaquin.
317	Atascadero.	H. Haight.	4,348.23	Patented June 18, 1860.	San Luis Obispo.

GRANTS OF LAND IN CALIFORNIA MADE BY SPANISH OR MEXICAN AUTHORITIES—Continued.

No. on Gen'l O. Map.	NAME OF GRANT.	Confirinee.	Area.	Condition of Title.	Where Located.
233	Ausaymas y San Felipe.	F. P. Pacheco	35,504.34	Patented April 18, 1859	San Benito and Santa Clara.
455	Azusa.	A. Duarte	6,996.62	Patented June 6, 1878.	Los Angeles.
456	Azusa.	Henry Dalton	4,431.47	Patented May 29, 1876	Los Angeles.
434	Ballona, La.	A. Machado et al.	13,919.90	Patented December 8, 1873.	Los Angeles.
3	Barranca (La) Colorada.	W. B. Ide.	17,707.49	Patented July 3, 1860	Tehama.
35	Baulinas, Las.	G. Briones	8,911.34	Patented January 9, 1866.	Marin.
29	Blucher.	Heirs of S. Smith.	26,759.42	Patented June 19, 1858	Marin and Sonoma.
539	Boca de Santa Monica	Ysidro Reys et al.	6,656.93	Patented July 21, 1882	Los Angeles.
125	Boca de la Cañada del Pincle	M. M. Valencia	13,316.26	Patented November 30, 1878	Contra Costa.
502	Boca de la Playa	E. Vejar	6,607.37	Patented March 1, 1879	Los Angeles.
27	Bodega.	M. T. Curtis et al.	35,487.53	Patented April 18, 1859	Sonoma.
18	Boga.	T. O. Larkin	22,184.66	Patented October 6, 1865	Butte and Sutter.
469	Bolsa Chica, La.	J. Ruiz	8,107.46	Patented May 7, 1874	Los Angeles.
245	Bolsa Nueva y Moro Cojo.	M. A. P. de Castro et al.	30,901.34	Patented November 20, 1873	Monterey.
352	Bolsa del Chamisal.	L. T. Burton	14,335.22	Patented August 27, 1867	San Luis Obispo.
252	Bolsa de Escarpinas.	S. Espinosa	6,416.96	Patented September 26, 1876	Monterey.
221	Bolsa de San Cayetano.	J. de J. Vallejo.	8,866.43	Patented February 14, 1865.	Monterey.
231	Bolsa de San Felipe	F. P. Pacheco	6,794.76	Patented January 14, 1871.	San Benito.
220	Bolsa del Pajaro	S. Rodriguez	5,496.50	Patented January 4, 1860	Santa Cruz.
254	Bolsa del Potrero y Moro Cojo, or La Sagrada Familia	J. B. R. Cooper	6,945.77	Patented December 19, 1859	Monterey.
471	Bolsas, Las, one undivided one half	R. Yorba et al.	33,460.04	Patented June 19, 1874.	Los Angeles.
471	Bolsas, Las, one undivided one half	Maria C. Nieto	22,206.27	Patented August 27, 1877	Los Angeles.
7	Bosquejo	P. Lassen	2,288.00	Patented January 10, 1862	Butte and Tehama.
518	Buena Vista.	J. Machado	7,725.56	Before Com. Gen'l Land Office.	San Diego.
274	Buena Vista	Malarin, att'y for Estrada	14,639.19	Patented September 15, 1869	Monterey.
150	Buri Buri	J. de la Cruz Sanchez et al.	4,438.67	Patented October 17, 1872	San Mateo.
191	Butano.	M. Rodriguez	4,439.07	Patented April 30, 1866.	San Mateo.
429	Brea, La	A. J. Rocha et al.	4,500.42	Patented April 15, 1873	Los Angeles.
63	Cabeza de Santa Rosa, part of	Julo Carrillo.	336.19	Patented July 16, 1866	Sonoma.
63	Cabeza de Santa Rosa, part of	F. Carrillo de Castro.	1,667.68	Patented August 25, 1881	Sonoma.
63	Cabeza de Santa Rosa, part of	Jas. Eldridge	640.14	Patented January 5, 1880.	Sonoma.
63	Cabeza de Santa Rosa, part of	John Hendley	256.16	Patented December 9, 1879	Sonoma.
63	Cabeza de Santa Rosa, part of	J. de J. Mallagh		Patented December 11, 1879	Sonoma.

63	Cabeza de Santa Rosa, part of.....	J. R. Meyer et al.....	1,484.82	Patented April 9, 1879.....	Sonoma.
425	Calhucnga.....	D. W. Alexander et al.....	388.34	Patented August 2, 1872.....	Los Angeles.
534	Cajon, El.....	Thos. W. Sutherland, guardian, etc.....			
407	Calleguas.....	Gabriel Ruiz.....	48,790.85	Patented April 6, 1876.....	San Diego.
543	Camartas, Las.....	Ferdinand Vassault.....	8,968.29	Patented March 22, 1866.....	Ventura.
100	Campo de los Franceses.....	C. M. Weber.....	18.57	Patented December, 1882.....	San Francisco.
414	Cañada, La.....	J. R. Scott et al.....	48,747.03	Patented March 18, 1861.....	San Joaquin.
84	Cañada de Capay.....	Jasper O'Farrell et al.....	5,832.10	Patented August 1, 1866.....	Los Angeles.
193	Cañada de los Capitancillos.....	Guadalupe Mining Comp'y.....	40,078.58	Patented February 16, 1865.....	Yolo.
151	Cañada de Guadalupe la Visitacion y Rodeo Viejo.....	H. R. Payson.....	1,109.57	Patented September 20, 1871.....	Santa Clara.
152	Cañada de Guadalupe y Rodeo Viejo.....	Wm. Pierce.....	5,473.47	Patented December 15, 1865.....	San Francisco and San Mateo.
40	Cañada de Herera.....	Heirs of D. Sais.....	942.93	Patented September 22, 1865.....	San Francisco and San Mateo.
52	Cañada de Jonive.....	J. O. Farrell.....	6,058.45	Patented June 25, 1876.....	Marin.
181	Cañada de Pala.....	J. J. de Bernal et al.....	10,786.51	Patented February 18, 1858.....	Sonoma.
51.	Cañada de Pogolimi.....	M. A. Cazares.....	15,714.10	Patented March 9, 1863.....	Santa Clara.
168	Cañada de Raymundo.....	Greer & Coppinger.....	8,780.81	Patented November 3, 1858.....	Sonoma.
377	Cañada de Salspuedes.....	John Keyes.....	12,545.10	Patented July 19, 1859.....	San Mateo.
197	Cañada de San Felipe y Las Animas.....	C. M. Weber.....	6,656.21	Patented February 18, 1874.....	Santa Barbara.
391	Cañada de San Miguelito.....	J. F. de Rodriguez et al.....	8,787.80	Patented August 9, 1866.....	Santa Clara.
513	Cañada de San Vicente y Mesa del Padre Barrona.....	Domingo Yorba.....	8,877.04	Patented June 15, 1871.....	Ventura.
170	Cañada de Verde y Arroyo de la Purisima.....	J. A. Alvizo.....	13,316.13	Patented November 17, 1873.....	San Diego.
389	Cañada del Corral.....	J. D. Ortega.....	8,905.58	Patented December 15, 1865.....	San Mateo.
114	Cañada del Corte de Madera.....	Thurn & Carpenter.....	8,875.76	Patented May 30, 1866.....	Santa Barbara.
208	Cañada del Hambre y las Bolsas.....	Theodora Soto.....	3,565.91	Patented June 15, 1882.....	San Mateo.
208	Cañada del Rincon en el Rio de San Lorenzo de Santa Cruz.....	Pedro Sansovain.....	13,353.95	Patented December 31, 1866.....	Contra Costa.
243	Cañada de la Carpinteria.....	Heirs of J. Soto.....	5,826.85	Patented June 4, 1858.....	Santa Cruz.
283	Cañada de la Segunda.....	F. M. Haught.....	2,236.13	Patented October 10, 1873.....	Monterey.
498	Cañada de los Alisos.....	J. Serrano.....	4,366.80	Patented February 4, 1859.....	Monterey.
109	Cañada de los Buqueros.....	Livermore & Noriega.....	10,638.81	Patented June 27, 1871.....	Los Angeles.
535	Cañada de los Cochles.....	J. Lestrada.....	17,760.00	Patented November 22, 1889.....	Alameda and Contra Costa.
331	Cañada de los Nogales.....	J. M. Aguilar.....	28.39	Patented April 2, 1873.....	San Diego.
331	Cañada de los Osos and Pecho y Islay.....	John Wilson.....	1,199.56	Patented May 4, 1882.....	Los Angeles.
363	Cañada de los Pinos, or College Rancho.....	Bishop J. S. Alemany.....	32,430.76	Patented September 23, 1869.....	San Luis Obispo.
390	Cañada Larga ó Verde.....	J. Alvarado.....	35,499.37	Patented February 28, 1861.....	Santa Barbara.
475	Cañada de Santa Ana.....	B. Yorba.....	6,659.04	Patented March 26, 1873.....	Ventura.
			13,328.53	Patented July 21, 1866.....	Los Angeles and San Bernardino.

GRANTS OF LAND IN CALIFORNIA MADE BY SPANISH OR MEXICAN AUTHORITIES—Continued.

No. on Gen'l L. O. Map.	NAME OF GRANT.	Confirinee.	Area.	Condition of Title.	Where Located.
8	Capay	J. Soto	44,388.17	Patented August 18, 1859.	Colusa and Tehama.
194	Capitanillos, Los	Charles Fosatt	3,360.48	Patented February 3, 1865.	Santa Clara.
204	Carbonera, La	William Bode	2,224.79	Patented July 7, 1873	Santa Cruz.
79	Carne, Humana	Heirs of Edward A. Baile	17,962.22	Patented September 4, 1879	Napa.
224	Carneros, Los	Daniel Littlejohn	4,482.38	Patented August 9, 1866.	Monterey.
246	Carneros, Los	F. A. McDougall et al.	1,628.70	Patented March 17, 1862.	Monterey and San Benito.
57	Casamayoni	Wm. Forbes	26,738.36	Patented December 18, 1874	Sonoma.
355	Casmalia	A. Olivera	8,841.21	Patented July 30, 1863.	Santa Barbara.
345	Castec	J. M. Covarrubias	22,178.28	Patented November 27, 1866.	Kern.
82	Catacula	J. B. Chiles	8,545.72	Patented April 22, 1865.	Napa.
78	Caymus	George C. Yount	11,886.63	Patented April 3, 1863.	Napa.
467	Cerritos, Los	Juan Temple	27,054.36	Patented December 7, 1867.	Los Angeles.
536	Chamisal, El	Heirs of Felipe Vasquez	2,737.44	Patented March 20, 1877	Monterey.
89	Chimiles	Gordon & Coombs	17,762.44	Patented December 19, 1860.	Napa.
314	Cholame	E. E. White.	26,621.82	Patented April 1, 1865.	Monterey and San Luis Obispo.
328	Chorro, El	Juan Wilson	3,166.99	Patented March 23, 1861.	San Luis Obispo.
270	Chualar	M. Malarin, executor, etc.	8,889.68	Patented October 31, 1879	Monterey.
250	Cienega de Gabilan	J. D. Carr	48,780.72	Patented October 15, 1867	San Benito and Monterey.
268	Cienega de los Palcines	A. Castro et al.	8,917.52	Patented September 23, 1869	San Benito.
436	Cienega ó Paso de la Tijera	T. Sanchez et al.	4,219.34	Patented May 22, 1873.	Los Angeles.
428	Cienegas, Las	J. Abila et al.	4,439.06	Patented June 15, 1871	Los Angeles.
383	Cieneguitas, Las	A. Carrillo	28.15	In Court on title	Los Angeles.
296	Coches, Los	M. J. Soberanes	8,794.02	Sent for patent Dec. 27, 1883	Santa Barbara.
186	Coches, Los	A. Suñol et al.	2,219.34	Patented December 31, 1857.	Monterey.
59	Collayoni	Richie & Forbes	8,241.74	Patented January 5, 1863.	Santa Clara.
17	Colls	C. D. Sempie	8,876.02	Patented January 5, 1863.	Lake.
408	Conejo, El	J. de la G. y Noriega	48,571.56	Patented July 23, 1869.	Colusa.
337	Corral de Piedra	J. M. Villavicencio	30,911.20	Patented January 8, 1873.	Los Angeles and Ventura.
362	Corral de Quinti	M. A. de la G. y Lataillade.	13,222.29	Patented October 29, 1867	San Luis Obispo.
190	Corral de Tierra	H. D. McCobb	4,434.77	Patented August 7, 1876.	Santa Barbara.
165	Corral de Tierra	Heirs of F. G. Palomeres	7,766.35	Patented January 21, 1876.	Monterey.
166	Corral de Tierra	Tiburcio Vasquez	4,436.18	Patented April 7, 1866.	San Mateo.
219	Cornillos, Rancho de los	Heirs of José Amesti	15,440.02	Patented January 6, 1873.	San Mateo.
173	Corte de Madera, El	M. Martinez	13,316.05	Patented February 28, 1861	Santa Cruz.
47	Corte Madera de Novato	Juan Martin	8,878.82	Patented June 19, 1858.	San Mateo and Santa Clara.
42	Corte Madera del Presidio	Heirs of John Read	7,845.12	Patented May 23, 1863.	Marin.
				Patented February 25, 1886.	

84	Consummes	Heirs of W. E. P. Hartnell	26,605.37	Patented April 29, 1869	Sacramento.
65	Cotate.	T. S. Page	17,238.60	Patented February 18, 1868	Sonoma.
472	Coyotes, Los	Andres Pico et al.	48,806.17	Patented March 9, 1875	Los Angeles.
---	Cruces, Las	Miguel Cordero et al.	8,888.00	Patented July 7, 1883	Santa Barbara.
538	Cuca, or El Potrero	M. J. de los Angeles	2,174.25	Patented July 22, 1879	San Diego.
479	Cucamonga	L. V. Prudhomme	13,045.20	Patented December 9, 1872	San Bernardino.
341	Cuyama	M. A. de la G. y Latallade	22,193.21	Patented July 20, 1877	San Luis Obispo.
342	Cuyama	Heirs of C. Latallade	48,827.50	Patented January 10, 1879	San Luis Obispo.
341	Cuyamaca	Augustin Olivera	35,501.32	Patented December 19, 1874	San Diego.
381	Dos Píedros, Los	N. A. Den	15,534.76	Patented February 23, 1877	Santa Barbara.
411	Encino, El	V. de la Osa et al.	4,460.73	Patented January 8, 1873	Los Angeles.
409	Escorpion, El	Urbano et al.	1,109.65	Patented December 11, 1876	Los Angeles.
142	Embarcadero de Santa Clara	B. Bernal	179.60	Final decree not entered.	Santa Clara.
522	Encinitos, Los	Andres Ybarra	4,431.03	Patented April 18, 1871	San Diego.
269	Encinal y Buena Esperanza	D. Spence	13,391.64	Patented May 23, 1862	Monterey.
74	Entre Napa, part of	P. D. Bailey	400.57	Before Surveyor-General	Napa.
74	Entre Napa, part of	N. Coombs	80.48	Patented June 9, 1866	Napa.
74	Entre Napa, part of	J. Green	2,051.04	Patented April 1, 1881	Napa.
74	Entre Napa, part of	M. F. de Hignara	877.53	Patented November 4, 1879	Napa.
74	Entre Napa, part of	Ralph L. Kilburn	403.96	Before Surveyor-General	Napa.
74	Entre Napa, part of	Jos. Mount et al.	40.00	Before Surveyor-General	Napa.
---	Entre Napa, part of	Mount & Cottrell	1,103.68	Before Surveyor-General	Napa.
74	Entre Napa, part of	John Patchett	69.88	Before Surveyor-General	Napa.
74	Entre Napa, part of	J. P. Thompson	307.05	Before Surveyor-General	Napa.
74	Entre Napa, part of	J. P. Walker	62.07	Before Surveyor-General	Napa.
74	Entre Napa, part of	Edward Wilson	335.28	Patented April 8, 1881	Napa.
74	Entre Napa, part of, or Los Carneros	Charles E. Hart	360.00	No decree filed	Napa.
74	Entre Napa, part of, or Rincon de los Carneros	Julius Martin	2,557.68	Patented April 3, 1858	Napa.
14	Esquon	Samuel Neal	22,193.78	Patented April 4, 1860	Butte.
28	Estero Americano.	Jasper O'Farrell	8,849.13	Patented February 3, 1858	Sonoma.
10	Farwell Rancho.	James Williams et al.	22,193.93	Patented July 1, 1863	Butte.
426	Feliz, Los	M. Y. Berdugo	6,647.46	Patented April 18, 1871	Los Angeles.
167	Feliz	D. Feliz	4,448.27	Patented April 21, 1873	San Mateo.
15	Fernandez	D. Z. Fernandez et al.	17,805.84	Patented October 14, 1867	Butte.
4	Flores, Las	Wm. G. Chard	13,315.58	Patented September 19, 1859	Tehama.
253	Gatos, Los, or Santa Rita	D. Perez et al.	4,424.46	Patented April 4, 1870	Monterey.
25	German	Chas. Meyer et al.	17,580.01	Patented July 30, 1872	Sonoma.
382	Goleta, La	Daniel Hill	4,426.10	Patented March 10, 1865	Santa Barbara.
406	Guadaluca.	Ysabel Yorba	30,593.85	Patented September 1, 1873	Ventura.
353	Guadalupe	D. Olivera et al.	43,681.85	Patented March 1, 1870	Santa Barbara and S. Luis Obispo.
273	Guadalupe y Llanitos de los Corcos	M. Malarin, executor, etc.	8,858.44	Patented June 29, 1865	Monterey.
515	Guejito	G. W. Hamley	13,298.59	Patented May 24, 1866	San Diego.

GRANTS OF LAND IN CALIFORNIA MADE BY SPANISH OR MEXICAN AUTHORITIES—Continued.

No. on Gen'l L. O. Map.	NAME OF GRANT.	Confirinee.	Area.	Condition of Title.	Where Located.
58	Guenoc.....	Ritchie & Forbes.....	21,220.03	Patented May 22, 1865.	Lake.
66	Guilicos, Los.....	Juan Wilson.....	18,833.86	Patented June 16, 1886	Sonoma.
519	Guañome.....	A. Solma et al.....	2,219.41	Patented September 7, 1871	San Diego.
462	Habra, La.....	Andres Pico et al.....	6,698.57	Patented December 4, 1872	Los Angeles.
19	Hocut.....	Chas. Covilland et al.....	31,079.96	Patented March 9, 1863	Yuba.
340	Husna.....	J. J. Sparks.....	22,152.90	Patented January 23, 1879	San Luis Obispo.
182	Hucos, Los.....	Roland & Hornsby.....	39,950.92	Patented May 13, 1876	Santa Clara.
315	Huer-huero.....	F. Branch.....	15,684.35	Patented August 9, 1866	San Luis Obispo.
421	Huerta de Cuati.....	V. Reid.....	128.25	Patented June 30, 1859	Los Angeles.
330	Huerta de Romualdo or El Chorro	Juan Wilson.....	117.13	Patented April 13, 1871	San Luis Obispo.
72	Huichica.....	J. P. Leese.....	18,704.04	Patented August 3, 1859	Sonoma and Napa.
404	Island of Santa Cruz.....	Andres Castillero.....	52,760.35	Patented March 21, 1867	Santa Barbara.
527	Island of San Diego.....	Peachy & Aspinwall.....	4,185.46	Patented June 11, 1869	San Diego.
470	Island of Santa Catalina.....	J. M. Covarrubias.....	45,820.43	Patented April 10, 1867	Los Angeles.
405	Island of Santa Rosa.....	M. C. de Jones et al.....	62,696.49	Patented October 3, 1871	Santa Barbara.
11	Jacinto.....	Wm. M. McKee.....	35,487.52	Patented September 19, 1859	Colusa.
531	Jamacha.....	A. Lorenzana.....	8,881.16	Patented April 11, 1871	San Diego.
541	Jamul.....	Heirs of H. S. Burton.....	8,926.22	Patented October 26, 1876	San Diego.
356	Jesus Maria.....	L. P. Burton et al.....	42,184.69	Patented September 7, 1871	Santa Barbara.
22	Jimeno.....	Larkin & Misroon.....	48,854.26	Patented July 18, 1862	Colusa and Yolo.
21	Johnson Rancho.....	Wm. Johnson.....	22,197.31	Patented August 3, 1857	Yuba.
80	Jota, La.....	Geo. C. Yount.....	4,453.84	Patented December 18, 1857	Napa.
113	Juntas, Las.....	Heirs of Wm. Welch.....	13,292.82	Patented July 22, 1870	Contra Costa.
241	Juristac.....	J. L. Sargent et al.....	4,540.44	Patented November 13, 1871	Santa Clara.
483	Jurupa, part of.....	A. Sterns.....	33,819.11	Patented May 23, 1879	San Bernardino.
482	Jurupa, part of.....	L. Rubideau.....	6,749.99	Patented December 8, 1876	San Bernardino.
69	Lac.....	J. P. Leese.....	176.58	Patented August 6, 1872	Sonoma.
360	Laguna, La.....	O. Gutierrez.....	48,703.91	Patented May 17, 1867	Santa Barbara.
495	Laguna, La.....	A. Sterns.....	13,338.84	Patented September 3, 1872	San Diego.
332	Laguna.....	Bishop J. S. Alemany.....	4,157.02	Patented February 4, 1859	San Luis Obispo.
217	Laguna de las Calabazas.....	F. Hernandez et al.....	2,304.75	Patented December 8, 1868	Santa Cruz.
163	Laguna de la Merced.....	J. de Haro et al.....	2,219.33	Patented September 10, 1872	San Francisco and San Mateo.
123	Laguna de los Palos Colorados.....	J. Moriga et al.....	13,316.25	Patented August 10, 1878	Contra Costa.
30	Laguna de San Antonio.....	B. Bojorquez.....	24,903.42	Patented November 21, 1871	Marin and Sonoma.
301	Laguna de Tache.....	M. Castro.....	46,800.62	Patented March 6, 1866	Fresno.

276	Laguna Seca	C. M. de Munras	2,179.50	Patented November 24, 1865	Monterey.
196	Laguna Seca	L. C. Bull et al.	19,972.92	Patented November 24, 1865	Santa Clara.
16	Larkin's Children's Ranch	F. Larkin et al.	44,364.22	Patented December 18, 1857	Colusa.
280	Laureles, Los	J. M. & J. de M. Boronda	6,624.99	Patented August 9, 1866	Monterey.
285	Laureles, Los	L. Ransom	718.23	Patented April 18, 1871	Monterey.
347	Liebre, La	J. M. Flores	48,799.60	Patented June 21, 1875	Kern and Los Angeles.
296	Llano de Buena Vista	D. Spence	8,446.23	Patented January 4, 1860	Monterey.
12	Llano Seco	C. J. Brenham et al.	17,767.17	Patented June 18, 1860	Butte.
64	Llano de Santa Rosa	J. Carrillo	13,316.03	Patented November 27, 1865	Sonoma.
230	Llano del Tequesquite	V. Sanchez et al.	16,016.30	Patented December 29, 1871	San Benito.
81	Llacoalomi	Heirs of Julian Pope, dec'd.	8,872.79	Patented March 17, 1862	Napa.
365	Lomas de la Purificacion	Augustin Janseus	13,341.38	Patented April 18, 1871	Santa Barbara.
399	Lomas de Santiago	Theodoro Yorba	47,226.61	Patented February 1, 1868	Los Angeles.
239	Lomerias Muertas	V. Sanchez et al.	6,659.91	Patented August 9, 1866	San Benito.
374	Lompoc	J. & J. A. Carrillo	42,085.44	Patented November 3, 1873	Santa Barbara.
427	Los Angeles City Lands.	City of Los Angeles	17,172.37	Pat'd Aug. 4, '75, and Aug. 9, '66.	Los Angeles.
Los Angeles County, lot near San Pedro, in	Temple & Alexander		1.77	Before Surveyor-General	Los Angeles.
Mallacomes or Moristal	Cook & Ingalls		2,559.94	Patented February 18, 1859	Sonoma.
61	Mallacomes or Moristal y Plan de Agua Caliente, part of	J. S. Berrevesa	17,742.72	Patented July 10, 1873	Sonoma and Napa.
104	Mariposas, Los	G. W. P. Bissell et al.	5,527.22	Final decree not entered	Solano.
111	Medanos, Los	J. C. Fremont	44,386.83	Patented February 19, 1856	Mariposa.
110	Meganos, Los	Alice Marsh	8,858.83	Patented October 8, 1872	Contra Costa.
443	Mered, La	F. P. F. Temple et al.	13,316.00	Patented August 19, 1867	Contra Costa.
212	Mesa de Ojo de Agua	T. W. Russell	2,363.75	Patented February 13, 1872	Los Angeles.
138	Milpitas	Heirs of J. M. Alviso	54.36	Not approved by Com. G. L. O.	Santa Cruz.
307	Milpitas	Ygnacio Pastor	4,457.66	Patented June 30, 1871	Santa Clara.
281	Mission Carmelo	Bishop J. S. Alemany	43,280.90	Patented February 18, 1875	Monterey.
---	Mission Dolores, lot in	Candelario Valencia	9.00	Patented October 19, 1859	Monterey.
---	Mission Dolores, lot in	Elizabeth de Zalzo	1.78	Patented December 16, 1882	San Francisco.
---	Mission Dolores, two tracts at	Bishop J. S. Alemany	4.45	Sent up for patent Aug. 26, 1882	San Francisco.
161	Mission Dolores, lot in	F. DeHaro	8.54	Patented March 3, 1858	San Francisco.
156	Mission Dolores, lot in	F. DeHaro	2.04	Before Surveyor-General	San Francisco.
157	Mission Dolores, lot in	E. & J. R. Valencia	.44	Sent up for patent Aug. 21, 1885	San Francisco.
---	Mission Dolores, suerte in	Heirs of F. G. Palomares	.50	Rejected	San Francisco.
160	Mission Dolores, suerte in	C. S. de Bernal et al.	28.41	Patented April 1, 1870	San Francisco.
158	Mission la Purisima	J. R. Malo	5.86	Patented June 13, 1882	San Francisco.
372	Mission la Purisima de la	Bishop J. S. Alemany	14,735.76	Patented October 12, 1882	Santa Barbara.
373	Mission San Antonio	Bishop J. S. Alemany	14.04	Patented January 24, 1874	Santa Barbara.
308	Mission San Buenaventura	Bishop J. S. Alemany	33.19	Patented May 31, 1862	Monterey.
392	Mission San Buenaventura	Fernando Tico	36.27	Patented May 23, 1862	Ventura.
393	Mission San Buenaventura, lot in	M. A. R. de Poli	28.90	Patented June 9, 1866	Ventura.
396	Mission (Ex) San Buenaventura	Bishop J. S. Alemany	48,822.91	Patented August 24, 1874	Ventura.
533	Mission San Diego	Bishop J. S. Alemany	22.21	Patented May 23, 1862	San Diego.

GRANTS OF LAND IN CALIFORNIA MADE BY SPANISH OR MEXICAN AUTHORITIES—Continued.

No. on Gen'l L. O. Map.	NAME OF GRANT.	Confirinee.	Area.	Condition of Title.	Where Located.
532	Mission (Ex) San Diego.	S. Arguello	58,875.38	Patented September 1, 1876	San Diego.
412	Mission San Fernando	Bishop J. S. Alemany	76.94	Patented May 31, 1864	Los Angeles.
410	Mission (Ex) San Fernando	E. de Celis	116,858.46	Patented January 8, 1873	Los Angeles.
448	Mission San Gabriel	Bishop J. S. Alemany	190.69	Patented November 19, 1859	Los Angeles.
---	Mission San Gabriel, lot near	R. Valenzuela et al.	23.63	Patented December 4, 1875	Los Angeles.
135	Mission San José	Bishop J. S. Alemany	28.33	Patented March 3, 1858	Alameda.
240	Mission San Juan Bautista	Bishop J. S. Alemany	55.23	Patented November 19, 1859	San Benito.
503	Mission San Juan Capistrano	Bishop J. S. Alemany	44.40	Patented March 18, 1865	Los Angeles.
504	Mission San Juan Capistrano, tract near	S. Rios	7.09	Patented March 1, 1879	Los Angeles.
---	Mission San Luis Obispo	Bishop J. S. Alemany	52.72	Patented September 2, 1859	San Luis Obispo.
333	Mission San Luis Obispo, lot in	Juan Wilson	1.00	In Court on title	San Luis Obispo.
521	Mission (Ex) San Luis Rey	Bishop J. S. Alemany	53.39	Patented March 18, 1865	San Diego.
313	Mission San Miguel	Bishop J. S. Alemany	33.97	Patented September 2, 1859	Monterey.
43	Mission San Rafael	Bishop J. S. Alemany	6.48	Patented October 19, 1859	Marin.
384	Mission Santa Barbara	Bishop J. S. Alemany	283.13	Patented March 18, 1865	Santa Barbara.
188	Mission Santa Clara	Bishop J. S. Alemany	19.95	Patented March 3, 1865	Santa Clara.
---	Mission Santa Clara, lot near	F. Arce	10.00	No decree on file	Santa Clara.
210	Mission Santa Cruz	Bishop J. S. Alemany	16.94	Patented September 2, 1859	Santa Cruz.
368	Mission Santa Ynez	Bishop J. S. Alemany	17.35	Patented May 23, 1862	Santa Barbara.
295	Mission Soledad	Bishop J. S. Alemany	34.47	Patented November 19, 1859	Monterey.
294	Mission (Ex) Soledad	F. Soberanes	8,899.82	Patented May 18, 1874	Monterey.
70	Mission Sonoma	Bishop J. S. Alemany	14.20	Patented May 31, 1862	Sonoma.
376	Mission Vieja de la Purisima	J. & J. Carrillo	4,413.60	Patented November 7, 1873	Santa Barbara.
446	Mission Vieja, or La Paz	Juan Forster	46,432.65	Patented August 6, 1863	Los Angeles.
53	Molinos, Los	J. B. R. Cooper	17,892.42	Patented April 3, 1853	Sonoma.
506	Monserate	Y. M. Alvarado	13,322.90	Patented July 17, 1872	San Diego.
112	Monte del Diablo	S. Pacheco	17,921.54	Patented March 19, 1859	Contra Costa.
---	Monterey County, tract in	Heirs of T. Blanco	44.99	Patented November 28, 1881	Monterey.
---	Monterey County, tract in	Rufina Castro	33.47	Patented March 18, 1885	Monterey.
262	Monterey County, tract in	Henry Cocks	1,106.03	Patented August 8, 1870	Monterey.
258	Monterey County, tract in	Simcon Castro	112.83	Patented July 30, 1867	Monterey.
284	Monterey County, tract in	James Meadows	4,591.71	Patented August 9, 1863	Monterey.
256	Monterey County, city lands	City of Monterey	30,865.65	Sent for patent July 26, 1880	Monterey.
325	Moro y Cayucos	J. McKinley	8,045.49	Patented January 19, 1878	San Luis Obispo.
26	Muniz	M. Torres	17,760.49	Patented February 4, 1860	Sonoma.

480	Muscupiahe	M. White	30,144.88	Patented June 22, 1872	San Bernardino.
528	Nacion, De la	Juan Forster	26,681.94	Patented February 27, 1866	San Diego.
263	Nacional	Vicente Cantua	6,633.29	Patented April 7, 1866	Monterey.
76	Napa, part of	S. Vallejo	3,178.93	Patented June 9, 1866	Napa.
76	Napa, part of	Lyman Bartlett	679.52	Patented June 9, 1866	Napa.
76	Napa, part of	A. L. Boggs	320.55	Patented May 11, 1877	Napa.
76	Napa, part of	L. W. Boggs	679.66	Sent up December 7, 1880	Napa.
76	Napa, part of	J. E. Brown	647.47	Before Com. Gen'l Land Office.	Napa.
76	Napa, part of	L. D. Brown	640.00	No decree filed.	Napa.
76	Napa, part of	Nathan Coombs	325.42	Patented March 25, 1873	Napa.
76	Napa, part of	G. N. Cornwall	600.00	No decree filed.	Napa.
76	Napa, part of	A. Farley	89.42	Before Surveyor-General	Napa.
76	Napa, part of	O. H. Frank	8,365.37	Sent up for patent Nov., 1890	Napa.
76	Napa, part of	J. M. Harbin	664.88	Sent up for patent Dec. 11, 1882	Napa.
76	Napa, part of	Hart & McGarry	470.14	Before Surveyor-General	Napa.
76	Napa, part of	Johnson Horrell	459.99	Before Surveyor-General	Napa.
76	Napa, part of	H. Ingraham	74.00	No decree filed.	Napa.
76	Napa, part of	Wm. Keely	45.84	Before Surveyor-General	Napa.
76	Napa, part of	Eben Knight	160.00	Before Surveyor-General	Napa.
76	Napa, part of	H. G. Langley	680.10	Before Surveyor-General	Napa.
76	Napa, part of	John Love	100.80	Before Surveyor-General	Napa.
76	Napa, part of	B. McCoombs	140.37	Before Surveyor-General	Napa.
76	Napa, part of	Hannah McCoombs	160.79	Before Surveyor-General	Napa.
76	Napa, part of	J. R. McCoombs	485.60	Before Surveyor-General	Napa.
76	Napa, part of	Ann McDonald et al.	283.19	No decree filed.	Napa.
76	Napa, part of	James McNeil	450.00	Patented June 9, 1866	Napa.
76	Napa, part of	W. H. Osborne	259.51	Before Surveyor-General	Napa.
76	Napa, part of	A. A. Ritchie	150.35	Patented June 9, 1866	Napa.
76	Napa, part of	J. K. Rose	564.83	Patented June 3, 1880	Napa.
76	Napa, part of	J. P. Thompson	604.68	Sent for patent Dec. 6, 1881	Napa.
76	Napa, part of	John Truebody	769.58	Patented October 1, 1874	Napa.
76	Napa, part of	Oxden & Wise	637.11	Patented June 20, 1866	Napa.
251	Natividad, La	Ramona Burton et al.	8,642.21	Patented November 1, 1861	Monterey.
20	New Helvetia	John A. Sutter	48,839.30	Patented November 1, 1861	Yuba, Sutter, and Sacramento.
32	Nicasio, part of	James Black	9,478.82	Patented November 1, 1861	Marin.
32	Nicasio, part of	B. R. Buckelew	8,695.27	Patented November 1, 1861	Marin.
32	Nicasio, part of	Frank & Reynolds	7,898.10	Patented November 1, 1861	Marin.
32	Nicasio, part of	H. W. Halleck	30,848.85	Patented April 5, 1873	Marin.
501	Nigul, El	Juan Abila et al.	13,316.01	Patented December 14, 1868	Los Angeles.
351	Nipomo	Wm. G. Dana	37,887.91	Patented October 7, 1862	San Luis Obispo.
278	Noche Buena	J. & J. de Monomany	4,411.56	Patented September 11, 1869	Monterey.
459	Nogales, Los	Maria de J. Garcia et al.	1,003.67	Patented April 10, 1866	Los Angeles.
367	Nojoqui	Ray Mondo Carillo	13,284.50	Patented July 22, 1866	Santa Barbara.
46	Novato	Assignees of Simmons	8,870.62		Marin.
379	Nuestra Señora del Refugio	A. M. Ortega et al.	26,629.30		Santa Barbara.

GRANTS OF LAND IN CALIFORNIA MADE BY SPANISH OR MEXICAN AUTHORITIES—Continued.

No. on Gen'l L. O. Map.	NAME OF GRANT.	Confirinee.	Area.	Condition of Title.	Where Located.
389	Ojai	Fernando Tico.	17,716.83	Patented December 22, 1870.	Ventura.
391	Qitos, Los	M. Soberanes	8,900.17	Patented April 18, 1871.	Monterey.
190	Ojo de Agua de la Coche	M. J. C. Murphy	8,927.10	Patented January 4, 1860.	Santa Clara.
169	Ojo de Agua de Figueroa	Miranda et al.	1.77	Patented April 28, 1877.	San Francisco.
48	Olmopali	Camilo Yntia	8,877.48	Patented December 18, 1862.	Marin.
95	Omochuines	Catharine Sheldon et al.	18,061.86	Patented July 1, 1870.	Sacramento.
105	Orestimba	Sebastian Nunez.	26,666.39	Patented July 30, 1863.	Stanislaus and Merced.
529	Otay	M. Estudillo	6,657.98	Patented January 20, 1872.	San Diego.
580	Otay or Janal	V. Dominguez et al.	4,437.16	Patented June 13, 1872.	San Diego.
180	Pala	E. White et al.	4,454.08	Patented October 8, 1866.	Santa Clara.
439	Palos Verdes, Los.	J. L. Sepulveda et al.	31,629.43	Patented June 22, 1880.	Los Angeles.
235	Panocha de San Juan y Los Car- risalitos	Ursua & Romo.	22,175.34	Patented July 30, 1867.	Merced.
282	Paraje de Sanchez	C. Lago et al.	6,584.32	Patented August 9, 1865.	Monterey.
965	Paso, Rancho del	Samuel Norris	44,371.42	Patented May 4, 1858.	Sacramento.
465	Paso de Bartolo, part of	B. Guirado	875.90	Patented September 27, 1867.	Los Angeles.
465	Paso de Bartolo, part of	Joaquin Supulveda	207.79	Patented March 17, 1881.	Los Angeles.
464	Paso de Bartolo.	P. Pico et al.	8,991.22	Patented August 5, 1881.	Los Angeles.
320	Paso de Robles	P. Rios	25,993.18	Patented July 12, 1886.	San Luis Obispo.
144	Pastoria de las Borregas.	Martin Murphy, Jr.	4,894.35	Patented December 15, 1865.	Santa Clara.
144	Pastoria de las Borregas.	Mariano Castro	4,172.13	Patented September 17, 1881.	Santa Clara.
490	Pauha	Luis Vignes	26,597.96	Patented January 19, 1860.	San Diego.
507	Pauma	J. A. Serrano et al.	13,300.60	Patented August 29, 1871.	San Diego.
525	Penasquitos, Los	F. M. Ruiz	8,486.01	Patented April 13, 1876.	San Diego.
107	Pescadero, El	Hiram Grimes et al.	35,446.06	Patented January 13, 1858.	Stanislaus and San Joaquin.
290	Pescadero, El	D. Jacks	4,426.46	Patented February 19, 1868.	Monterey.
108	Pescadero, El	Pico & Nagle	35,546.39	Patented March 10, 1865.	San Joaquin and Alameda.
49	Petaluma	M. G. Vallejo	66,622.17	Patented November 19, 1874.	Sonoma.
321	Piedra Blanca	J. J. Pico	48,805.59	Patented October 9, 1876.	San Luis Obispo.
126	Pinole, El	M. A. M. de Richardson	17,760.64	Patented August 22, 1868.	Contra Costa.
310	Piojo	Heirs of Joaquin Soto.	13,329.28	Patented April 30, 1866.	Monterey.
336	Pismo	I. J. Sparks	8,838.89	Patented November 16, 1866.	San Luis Obispo.
312	Plyto	W. S. Johnson et al.	13,299.27	Patented March 7, 1872.	Monterey.
227	Polka, La.	M. J. C. Murphy	4,166.78	Patented March 3, 1890.	Santa Clara.
401	Posas, Las	J. de la G. y Noriega	26,623.36	Patented January 18, 1881.	Ventura.
120	Positas, Las	Livermore & Noriega	8,880.00	Patented May 25, 1872.	Alameda.

385	Positas (Las) y La Calera.	M. C. de Jones.	3,281.70	Patented June 10, 1870	Santa Barbara.
145	Posolmi.	Lopez Ynigo et al.	1,695.90	Patented January 18, 1881	Santa Clara.
298	Posa de los Ositos.	Carlos Espinosa.	16,938.98	Patented June 29, 1865	Monterey.
	Gabriel.	Valenzuela et al.	95.95	Before Surveyor-General.	Los Angeles.
134	Potrero de los Cerritos.	Pacheco & Alviso.	10,610.26	Patented February 21, 1866	Alameda.
446	Potrero de Felipe Lugo.	Morillo & Romero.	2,042.81	Patented June 15, 1871	Los Angeles.
286	Potrero de San Carlos.	J. Gutierrez et al.	4,306.98	Patented June 9, 1862	Monterey.
329	Potrero de San Luis Obispo.	M. C. Boronda.	3,606.33	Patented July 1, 1870	San Luis Obispo.
178	Potrero de Santa Clara.	R. F. Stockton.	1,939.03	Patented December 30, 1861	Santa Clara.
494	Potreros of San Juan Capistrano.	Juan Forster.	1,167.74	Patented June 30, 1866	Los Angeles.
213	Potrero y Rincon de San Pedro de Reglado.	T. W. Russell.	91.53	Sent for patent October 5, 1885	Santa Cruz.
445	Potrero Grande.	J. M. Sanchez.	4,431.95	Patented July 19, 1859	Los Angeles.
537	Prietos (Los) y Nujalayegua.	José Dominguez.	48,728.67	Patented February 19, 1875	Santa Barbara.
2	Primer Cañon ó Rio de los Berren-dos.	J. F. Dye.	26,637.11	Patented February 28, 1871	Tehama.
419	Prospero Tract.	R. Valenzuela et al.	23.63	Patented December 4, 1875	Los Angeles.
424	Providencia.	D. W. Alexander et al.	4,064.33	Patented August 6, 1872	Los Angeles.
542	Pueblo, Lot No. 6.	Pedro Chaboya.	366.29	Patented June 21, 1876	Santa Clara.
460	Punte, La.	Workman & Roland.	48,790.55	Patented April 19, 1867	Los Angeles.
106	Puerto, Rancho del.	Reed & Wade.	13,340.39	Patented August 15, 1864	Stanislaus.
148	Pulgas, Las.	M. de la S. O. de Arguello et al.	35,240.47	Patented October 2, 1857	San Mateo.
279	Punta de Pinos.	H. De Graw et al.	2,666.51	Patented November 19, 1880	Monterey.
41	Punta de Quentin.	B. R. Buckelew.	8,877.44	Patented April 10, 1866	Marin.
375	Punta de la Concepcion.	A. Carrillo.	24,992.04	Patented June 10, 1880	Santa Barbara.
354	Punta de la Laguna.	L. Arellanes et al.	26,648.42	Patented October 2, 1873	S. Barbara and S. Luis Obispo.
34	Punta de Los Reyes (Sobrante).	Andrew Randall.	48,189.34	Patented June 4, 1860	Marin.
33	Punta de Los Reyes.	Andrew Randall.	8,877.68	Patented June 4, 1860	Marin.
295	Punta del Año Nuevo.	Heirs of Simeon Castro.	17,753.15	Patented December 3, 1857	San Mateo.
176	Purisima (La) Concepcion.	Juana Briones.	4,438.94	Patented August 15, 1871	Santa Clara.
83	Putas, Las.	M. A. Higuera de Berryessa et al.	35,515.82	Patented January 5, 1863	Solano.
88	Putas, Los.	J. M. Vaca & J. F. Peña.	44,383.78	Patented June 4, 1858	Solano.
187	Quito.	M. Alvisu et al.	13,300.85	Patented May 14, 1866	Santa Clara.
85	Quesesosi.	Wm. Gordon.	8,894.49	Patented February 4, 1860	Yolo.
102	Rancheria del Rio Estanislao.	Rico & Castro.	48,886.64	Patented January 31, 1863	Stanislaus and Calaveras.
296	Real de los Aguilas.	F. A. McDougal et al.	31,052.18	Patented September 23, 1869	San Benito.
297	Refugio.	F. & J. Bolcoff.	12,147.12	Patented February 4, 1860	Santa Cruz.
475	Rincon, El.	Bernardo Yorba.	4,431.47	Patented November 14, 1879	San Bernardino.
357	Rincon, El.	Teodoro Arellanes.	4,459.63	Patented November 22, 1872	Santa Barbara.
56	Rincon de Musulacion.	Johnson Horrell et al.	8,866.89	Patented June 9, 1866	Sonoma.
146	Rincon de San Francisco.	T. E. & S. Robles.	8,418.21	Patented February 19, 1868	Santa Clara.
261	Rincon de San Francisco.	J. E. Boronda.	2,229.70	Patented July 13, 1860	Monterey.
516	Rincon del Diablo.	Heirs of Juan B. Alvarado.	12,653.77	Patented May 3, 1872	San Diego.

GRANTS OF LAND IN CALIFORNIA MADE BY SPANISH OR MEXICAN AUTHORITIES—Continued.

No. on Gen'l L. O. Map.	NAME OF GRANT.	Confirnee.	Area.	Condition of Title.	Where Located.
461	Rincon de la Brea.....	G. Ybarra.....	4,452.59	Patented November 14, 1864	Los Angeles.
272	Rincon de la Punta del Monte	Teodoro Gonzales	15,218.62	Patented November 28, 1866.	Monterey.
255	Rincon de las Salinas.....	Rafael Estrada.....	2,220.02	Patented March 1, 1881	Monterey.
153	Rincon de las Salinas y Potrero Viejo.....	Heirs of J. C. Bernal.....	4,446.40	Patented December 31, 1857	San Francisco and San Mateo.
435	Rincon de los Bueyes.....	F. Higuera et al.....	3,127.89	Patented August 27, 1872	Los Angeles.
241	Rincon de los Esteros.....	Rafael Alvisio et al.....	2,900.19	Patented July 29, 1872	Santa Clara.
140	Rincon de los Esteros.....	F. Berreyesa et al.....	1,844.54	Patented July 28, 1873	Santa Clara.
139	Rincon de los Esteros.....	E. E. White.....	2,308.17	Patented May 23, 1862	Santa Clara.
192	Rinconada de los Gatos.....	Hernandez & Peralta.....	6,631.44	Patented March 19, 1860	Santa Clara.
147	Rinconada del Arroya de San Francisquito.....	Heirs of M. A. Mesa.....	2,229.84	Patented July 26, 1872	Santa Clara.
86	Rio Jesus Maria.....	J. M. Harbin et al.....	26,637.42	Patented July 3, 1858.	Yolo.
403	Rio de Santa Clara.....	Valentin Cota et al.....	44,883.30	Patented September 5, 1872	Ventura.
98	Rio de los Americanos.....	J. L. Folsom.....	35,521.36	Patented November 3, 1864	Sacramento.
6	Rio de los Molinos.....	A. G. Toomes.....	22,172.46	Patented December 3, 1858	Tehama.
87	Rio de los Puntos.....	Wm. Wolfskill.....	17,754.73	Patented December 18, 1858	Yolo and Solano.
50	Roblar de la Miseria.....	Daniel Wright et al.....	16,887.45	Patented January 18, 1858	Sonoma.
	Russell Tract.....	T. W. Russell.....	145.89	Before Surveyor-General	Santa Cruz.
257	Salinas, Las.....	Heirs of G. Espinoza.....	4,413.81	Patented March 26, 1867	Monterey.
223	Salsipuedes.....	James Blair et al.....	31,201.37	Patented March 2, 1861	Santa Cruz and Santa Clara.
219	San Andres.....	Guadalupe Castro et al.....	8,911.53	Patented January 31, 1876	Santa Cruz.
130	San Antonio, part of.....	Ygnacio Peralta.....	9,416.66	Patented February 3, 1858	Alameda.
129	San Antonio, part of.....	A. M. Peralta.....	15,206.59	Patented June 25, 1874	Alameda.
128	San Antonio, part of.....	V. & D. Peralta.....	18,848.98	Patented February 10, 1877	Alameda.
442	San Antonio.....	A. M. Lugo.....	29,513.35	Patented July 20, 1866	Los Angeles.
176	San Antonio.....	E. Mesa et al.....	4,440.31	Patented August 6, 1866	Santa Clara.
	San Antonio, part of.....	Wm. A. Dana et al.....	3,541.80	Patented December 18, 1857	Santa Clara.
190	San Antonio, or Pescadero.....	J. J. Gonzales.....	3,282.32	Patented June 7, 1886	San Mateo.
413	San Antonio, or Rodeo de las Aguas.....	M. R. Valdez.....	4,449.31	Patented June 27, 1871	Los Angeles.
202	San Augustin.....	J. L. Majors.....	4,436.78	Patented July 25, 1866	Santa Cruz.
304	San Benito.....	James Watson.....	6,671.08	Patented September 6, 1869	Monterey.
303	San Bernabe.....	Henry Cocks.....	13,246.98	Patented March 27, 1875	Monterey.
326	San Bernardo.....	Vincente Cane.....	4,379.42	Patented April 1, 1865	San Luis Obispo.
524	San Bernardo.....	M. A. Snook.....	17,763.07	Patented November 17, 1874	San Diego.

306	San Bernardo	M. Soberanes	13,345.65	Patented March 9, 1874	Monterey.
481	San Bernardino	J. de C. Lugo et al.	35,509.41	Patented November 24, 1865	San Bernardino.
1	San Buenaventura	P. B. Reading	26,632.09	Patented January 17, 1857	Shasta.
369	San Carlos de Jonata	J. Carrillo et al.	26,634.31	Patented December 2, 1872	Santa Barbara.
526	San Diego, pueblo land	City of San Diego	47,323.08	Patented April 10, 1874	San Diego.
523	San Dieguito	J. L. Osuna et al.	8,824.71	Patented April 18, 1871	San Diego.
343	San Emidio	Francisco Dominguez	17,709.79	Patented April 10, 1866	Kern.
399	San Francisco	Jacoba Feliz et al.	48,611.88	Patented February 12, 1875	Ventura and Los Angeles.
155	San Francisco, pueblo land	City of San Francisco	12,643.44	Patented June 20, 1884	San Francisco.
---	San Francisco, tract in	Sherreback	120.00	Before Surveyor-General	San Francisco.
162	San Francisco, two lots in	J. P. Leese et al.	3.38	Patented March 3, 1858	San Francisco.
226	San Francisco de las Llagas	J. & M. Murphy	29,283.24	Patented March 19, 1868	Santa Clara.
174	San Francisquito	M. C. V. de Rodriguez	1,471.00	Patented June 8, 1868	Santa Clara.
287	San Francisquito	José Abrego et al.	8,813.50	Patented June 8, 1862	Monterey.
447	San Francisquito	Henry Dalton	8,893.62	Patented May 30, 1867	Los Angeles.
---	San Gabriel, tract near	Juan Silva	22.90	Before Surveyor-General	Los Angeles.
449	San Gabriel, tract near	H. P. Dorsey	22.90	Before Surveyor-General	Los Angeles.
420	San Gabriel, tract near	Michael White	78.23	Patented August 26, 1871	Los Angeles.
417	San Gabriel, tract near	José Ledesma	22.21	Patented June 20, 1871	Los Angeles.
416	San Gabriel, tract near	J. P. de J. Courtney	49.29	Patented June 20, 1871	Los Angeles.
450	San Gabriel, tract near	Francisco Sales	19.43	Patented June 20, 1871	Los Angeles.
451	San Gabriel, tract near	Simeon (Indian)	30.45	Patented December 27, 1876	Los Angeles.
452	San Gabriel, two tracts near	Daniel Sexton	227.78	Patented May 16, 1871	Los Angeles.
418	San Gabriel, tract near	José Domingo	22.34	Patented August 23, 1871	Los Angeles.
453	San Geronimo	J. W. Revere	8,701.00	Patented April 4, 1860	Marin.
39	San Geronimo	R. Villavicencio	8,893.35	Patented July 10, 1876	San Luis Obispo.
324	San Gregorio	M. C. V. de Rodriguez	13,344.15	Patented February 19, 1861	San Mateo.
171	San Gregorio	Salvador Castro	4,439.31	Patented February 19, 1861	San Mateo.
172	San Gregorio	Heirs of J. A. Estudillo	36,503.03	Patented January 17, 1880	San Diego.
489	San Jacinto	L. Rubideau	4,439.57	Patented August 13, 1872	San Bernardino.
488	San Jacinto y San Gorgonio, tract between	T. W. Sutherland, guardian	48,861.10	Patented January 9, 1883	San Bernardino and San Diego.
487	San Jacinto Nuevo y Potrero	José Sepulveda	48,803.16	Patented September 19, 1867	Los Angeles.
500	San Joaquin	C. Cervantes	7,424.69	Patented January 6, 1874	San Benito.
232	San Joaquin	Dalton, Palomares & Vejar	22,340.41	Patented January 20, 1875	Los Angeles.
458	San José	Dalton, Palomares & Vejar	4,430.64	Patented December 4, 1875	Los Angeles.
457	San José, addition to	Ygnacio Pacheco	6,659.25	Patented January 14, 1861	Marin.
45	San José	City of San José	55,891.77	Patented June 4, 1884	Santa Clara.
179	San José, pueblo lands	B. D. Wilson	4,438.69	Patented July 5, 1866	Los Angeles.
431	San José de Buenos Ayres	José Castro	8,576.00	In Court on title	Monterey.
509	San José y Sur Chiquito	J. J. Warner	26,688.93	Patented January 16, 1880	San Diego.
97	San José del Valle	Hiram Grimes	19,982.70	Patented July 9, 1860	Sacramento.
185	San Juan	J. A. Narvaez	8,873.54	Patented December 1, 1865	Santa Clara.

GRANTS OF LAND IN CALIFORNIA MADE BY SPANISH OR MEXICAN AUTHORITIES—Continued.

No. on Gen'l L. O. Map.	NAME OF GRANT.	Confirinee.	Area.	Condition of Title.	Where Located.
247	San Juan Bautista, tract near Mis- sion of	M. Larios	4,493.00	Patented August 8, 1870.	San Benito.
248	San Juan Bautista, tract near Mis- sion of	P. Breen	401.25	Patented January 22, 1877	San Benito.
473	San Juan Cajon de Santa Ana	J. P. Ontiveros	35,970.92	Patented May 21, 1877	Los Angeles.
378	San Julian	J. de la G. y Noriega	48,221.68	Patented September 29, 1873	Santa Barbara.
238	San Justo	F. P. Pacheco	34,619.65	Patented December 6, 1865	San Benito
131	San Leandro	J. J. Estudillo	6,829.68	Patented July 15, 1863	Alameda.
300	San Lorenzo	Rafael Sanchez	48,285.95	Patented December 22, 1870	Monterey and San Benito.
249	San Lorenzo	F. Soberanez	21,884.38	Patented July 28, 1866	Monterey.
302	San Lorenzo	Heirs of A. Randall	22,264.47	Patented June 4, 1870	Monterey.
132	San Lorenzo	Barbara Sofa et al.	6,085.85	Patented April 14, 1877	Alameda.
122	San Lucas	Guillermo Castro	26,722.52	Patented February 14, 1865	Alameda.
305	San Lucas	James McKinley	8,874.72	Patented February 23, 1882	Monterey.
234	San Luis Obispo, lot near	J. P. Pacheco	48,821.43	Patented May 16, 1871	Santa Clara and Merced.
---	San Luis Obispo	J. M. Bonilla	3.85	Sent up for patent Aug. 26, 1882	San Luis Obispo.
327	San Luisito	Guadalupe Cantua	4,389.56	Patented May 18, 1860	San Luis Obispo.
364	San Marcos	N. A. Don et al.	35,573.10	Patented September 6, 1869	Santa Barbara.
149	San Mateo	Ex'rs of W. D. M. Howard	6,458.80	Patented November 18, 1857	San Mateo.
154	San Mateo	J. de J. Noc	4,443.38	Patented March 30, 1857	San Francisco and San Mateo.
334	San Miguel	Olivas & Lorenzana	4,033.91	Patented March 21, 1873	Ventura.
62	San Miguel	Heirs of M. West	6,663.23	Patented June 29, 1865	Sonoma.
235	San Miguelito	Mariana Gonzales	22,135.89	Patented August 8, 1867	Monterey.
309	San Miguelito	Miguel Avila	14,198.20	Patented February 23, 1877	San Luis Obispo.
127	San Pablo	J. Y. Castro	17,938.59	Patented January 31, 1873	Contra Costa.
422	San Pasqual	B. D. Wilson	708.57	Patented February 12, 1881	Los Angeles.
415	San Pasqual	Mannel Garfias	13,693.93	Patented April 3, 1863	Los Angeles.
---	San Pasqual, 2,000 varas near	Juan Gallardo	700.00	Not surveyed	Los Angeles.
440	San Pedro	M. Dominguez et al.	43,119.13	Patented December 18, 1858	Los Angeles.
164	San Pedro	F. Sanchez	8,926.46	Patented November 8, 1870.	San Mateo.
---	San Pedro	G. O. de Chapman et al.	4,458.00	In Court on title	Santa Barbara.
44	San Pedro, Santa Margarita y Las Gallinas	Timothy Murphy	21,678.69	Patented February 21, 1866	Marin.
423	San Rafael	Julio Berdugo et al.	36,403.32	Patented January 23, 1882	Los Angeles.
118	San Ramon	J. M. Amador	16,516.95	Patented March 18, 1865	Contra Costa and Alameda.
117	San Ramon	Leo, Norris	4,450.94	Patented July 3, 1882	Contra Costa.

110	San Ramon	H. W. Carpenter	8,917.36	Patented April 7, 1866	Contra Costa.
322	San Simeon	J. M. Gomez	4,468.81	Patented April 7, 1866	San Luis Obispo.
293	San Vicente	C. Munraez et al.	19,979.01	Patented June 29, 1865	Monterey.
195	San Vicente	M. Z. B. Berreyesa et al.	4,438.36	Patented June 24, 1868	Santa Clara.
204	San Vicente	B. A. Escamilla	10,802.60	Patented May 6, 1870	Santa Clara.
432	San Vicente y Santa Monica	R. Sepulveda	30,259.65	Patented July 23, 1881	Los Angeles.
228	San Ysidro	Jolin Gilroy et al.	4,460.67	Patented September 27, 1867	Santa Clara.
229	San Ysidro	Quintin Ortega	4,438.65	Patented October 22, 1868	Santa Clara.
24	Sanel	Fernando Feliz	17,754.38	Patented December 18, 1860	Santa Clara.
93	Sanjon de los Morquellunos	Heirs of A. Chabolla	35,508.14	Patented May 30, 1865	Mendocino.
198	Sanjon de Santa Rita	F. Soberanes	48,823.84	Patented November 20, 1862	San Joaquin and Sacramento.
358	Santa Ana	C. Ayala et al.	21,522.04	Patented December 22, 1870	Fresno and Merced.
477	Santa Ana del Chino	M. M. Williams et al.	22,234.20	Patented February 15, 1869	Ventura.
478	Santa Ana del Chino, addition	M. M. Williams et al.	13,366.16	Patented April 29, 1869	San Bernardino.
237	Santa Ana y Quien Sabe	Manuel Larios et al.	48,822.60	Patented May 1, 1860	San Bernardino.
464	Santa Anita	Henry Dalton	13,319.06	Patented August 9, 1866	San Benito.
386	Santa Barbara, pueblo	City of Santa Barbara	17,826.17	Patented May 31, 1872	Los Angeles.
177	Santa Clara, tract near	J. Enright	710.14	Patented May 1, 1866	Santa Barbara.
189	Santa Clara, two tracts near	M. S. Bennett	358.51	Patented July 19, 1871	Santa Clara.
402	Santa Clara del Norte.	V. Sanchez	13,988.91	Patented November 5, 1869	Santa Clara.
334	Santa Fe, Rancho de	T. S. Colima	165.76	Patented August 19, 1866	Ventura.
463	Santa Gertrudes, part of	McFarland & Downey	3,636.23	Patented July 17, 1877	San Luis Obispo.
466	Santa Gertrudes, part of	F. Z. Branch	16,954.83	Patented August 22, 1868	Los Angeles.
338	Santa Manuela	Joaquin Estrada	17,734.94	Patented April 9, 1861	Los Angeles.
316	Santa Margarita	Pio Pico et al.	138,440.78	Patented March 28, 1879	San Luis Obispo.
505	Santa Margarita y Las Flores	J. P. Davidson	17,773.33	Patented March 18, 1865	San Luis Obispo.
395	Santa Paula y Saticoy	Yountz, administrator	8,894.01	Patented June 25, 1875	San Diego.
119	Santa Rita	J. R. Malo	13,316.05	Patented March 18, 1866	Ventura.
371	Santa Rita	Julian Estrada	13,183.62	Patented March 18, 1866	Alameda.
323	Santa Rosa	M. J. O. de Cota et al.	15,625.55	Patented April 30, 1872	Santa Barbara.
370	Santa Rosa	Juan Moreno	47,815.10	Patented October 10, 1872	San Luis Obispo.
493	Santa Rosa	Augustin Bernal	9,647.13	Patented March 8, 1867	Santa Clara.
184	Santa Teresa	Francisco Arce	17,774.12	Patented May 21, 1866	San Diego.
319	Santa Ysabel	J. J. Ortega et al.	17,719.40	Patented May 14, 1872	Santa Clara.
510	Santa Ysabel	B. Yorba et al.	78,941.49	Patented December 21, 1883	San Luis Obispo.
474	Santiago de Santa Ana	W. A. Richardson	19,571.92	Patented August 7, 1879	San Diego.
36	Saucelito	Wilson et al.	2,211.65	Patented October 7, 1862	Los Angeles.
277	Sauquito	R. H. Thomas	22,212.21	Patented October 14, 1867	Marin.
5	Saucos	J. P. Leese	10,241.86	Patented September 2, 1859	Monterey.
264	Sausal	A. I. Abila	22,458.94	Patented March 24, 1875	Tehama.
438	Sausal Redondo	T. W. Moore et al.	8,880.81	Patented March 14, 1872	Monterey.
397	Sespe	Martina Castro	1,698.03	Patented March 19, 1860	Los Angeles.
215	Shoquel	Martina Castro	32,702.41	Patented March 19, 1860	Ventura.
201	Shoquel Augmentation	Bernardo Yorba	17,786.89	Patented February 4, 1875	Santa Cruz.
485	Sierra, La				San Bernardino.

GRANTS OF LAND IN CALIFORNIA MADE BY SPANISH OR MEXICAN AUTHORITIES—Continued.

No. on Gen'l L. O. Map.	NAME OF GRANT.	Confirnee.	Area.	Condition of Title.	Where Located.
484	Sierra, La	Vicenta Sepulvada	17,774.19	Patented April 28, 1877	San Bernardino.
400	Simi	J. de la G. y Noriega	113,009.21	Patented June 29, 1865	Los Angeles and Ventura.
348	Sisquoc	J. B. Huie et al.	35,485.90	Patented August 24, 1866	S. Luis Obispo and Santa Barbara.
---	Sobranite, El	J. J. and V. Castro	20,595.42	Patented August 11, 1883	Contra Costa.
486	Sobranite de San Jacinto	M. de R. de Aguirre	48,847.28	Patented October 25, 1867	San Bernardino.
225	Solis	R. Castro et al.	8,875.46	Patented January 18, 1869	Santa Clara.
63	Sonoma, pueblo	City of Sonoma	6,063.95	Patented March 31, 1880	Sonoma.
71	Sonoma City, lot in	M. G. Vallejo	3.81	Patented April 30, 1866	Sonoma.
54	Sotomayo	Heirs of H. D. Fitch	48,836.51	Patented April 8, 1858	Sonoma.
31	Soulaquile, part of	G. N. Cornwall	919.18	Patented January 18, 1879	Marin.
31	Soulaquile, part of	L. D. Watkins	1,446.79	Patented January 18, 1879	Marin.
31	Soulaquile, part of	M. F. Gormley	2,266.25	Patented January 18, 1879	Marin.
31	Soulaquile, part of	P. J. Vasquez	3,774.20	Patented January 18, 1879	Marin.
31	Soulaquile, part of	J. S. Brackett	2,492.19	Patented January 18, 1879	Marin.
350	Suey, Rancho de	R. C. de Wilson	48,834.27	Patented August 10, 1865	Santa Barbara and S. Luis Obispo.
91	Suisun	A. A. Richie	17,754.73	Patented January 17, 1857	Solano.
---	Suisun, part of	J. H. Fine	482.19	Patented December 16, 1882	Solano.
288	Sur, El	J. B. R. Cooper	8,949.06	Patented May 18, 1886	Monterey.
441	Tajauta	E. Abila	3,559.86	Patented January 8, 1873	Los Angeles.
344	Tejon, El	Aguirre & Del Valle	97,616.78	Patented May 9, 1863	Kern.
398	Temescal	R. de la Cuesta	13,339.07	Patented September 13, 1871	Ventura and Los Angeles.
491	Temecula	Luis Vignes	26,608.94	Patented January 18, 1860	San Diego.
492	Temecula, lands in valley of	P. Apis	2,233.42	Patented January 8, 1873	San Diego.
349	Tepusquet	A. M. Cota et al.	8,900.75	Patented February 23, 1871	S. Luis Obispo and Santa Barbara.
365	Tequesis	A. M. Villa	8,919.00	Patented July 24, 1869	Santa Barbara.
101	Thompson's Rancho	A. B. Thompson	35,532.80	Patented May 16, 1858	San Joaquin and Stanislaus.
359	Tiniquac	Wm. D. Foxen	8,874.60	Patented June 28, 1872	Santa Barbara.
357	Todos Santos y San Antonio	Heirs of W. E. P. Hartnell	17,721.17	Patented December 20, 1876	Santa Barbara.
90	Tolenas	J. F. Armijo	13,315.93	Patented October 12, 1868	Solano.
38	Tonales y Baulenes	Rafael Garcia	9,467.77	Patented October 15, 1883	Marin.
37	Tonales y Baulenes	Bethuel Phelps	13,644.66	Patented February 27, 1866	Marin.
433	Topanga Malibu Sequit	M. Keller	13,315.70	Patented August 29, 1872	Los Angeles.
275	Toro, El	Charles Walters	5,668.41	Patented October 7, 1862	Monterey.
497	Trabuco	Juan Forster	22,184.47	Patented August 6, 1860	Los Angeles.
211	Tres Ojos de Agua	Nicolas Dodero	176.03	Patented June 7, 1866	Santa Cruz.
259	Tucho, El	David Jacks	393.57	Patented July 30, 1867	Monterey.

113	Tujunga	D. W. Alexander et al.	6,660.71	Patented October 19, 1874	Los Angeles.
291	Tularcitos	Heirs of R. Gomez.	26,581.34	Patented March 12, 1866	Monterey.
137	Tularcitos, Las	José Higuera	4,394.35	Patented July 8, 1870	Santa Clara.
75	Tulucay	C. Juarez	8,865.58	Patented January 31, 1861	Napa.
260	Two Suertes	Gregory & Williams	37.69	Patented June 20, 1872	Monterey.
55	Tzabaco	Heirs of J. G. Pifa	15,439.32	Patented November 19, 1859	Sonoma.
143	Ulistac	Heirs of J. D. Hoppe	2,217.09	Patented October 12, 1865	Santa Clara.
92	Ulipinos, Los	John Bidwell	17,726.43	Patented August 9, 1866	Solano.
200	Uvas, Las	M. J. C. Murphy	11,079.93	Patented February 18, 1860	Santa Clara.
517	Vallecitos de San Marcos	Lorenzo Soto	8,975.17	Patented March 1, 1883	San Diego.
514	Valle de Pamo or Santa Maria	J. T. Ortega et al.	17,708.85	Patented July 30, 1872	San Diego.
511	Valle de San Felipe	Juan Forster	9,972.08	Patented August 6, 1866	San Diego.
121	Valle de San José	Suñol & Bernal	48,435.92	Patented March 15, 1865	Alameda.
508	Valle de San José	S. de la Portilla	17,634.06	Patented January 10, 1880	San Diego.
222	Vega del Rio del Pajaro	F. A. McDougall et al.	4,310.29	Patented January 18, 1864	Monterey.
249	Vergeles, Los	James Stokes	8,769.82	Patented April 3, 1875	Monterey and San Benito.
545	Virgenes, Las	M. A. Machado	8,885.04	Patented September 5, 1883	Los Angeles.
77	Yajome	Salvador Vallejo	6,652.58	Patented September 16, 1864	Napa.
183	Yerba Buena or Socayre	Antonio Chabolla	24,331.69	Patented January 3, 1859	Santa Clara.
23	Yokaya	C. Juarez	35,541.33	Patented March 8, 1867	Menocino.
361	Zaca, La	M. A. de la G. y Lataillade	4,458.10	Patented August 23, 1876	Santa Barbara.
271	Zanjones	M. Malarin, executor	6,714.49	Patented August 9, 1866	Monterey.
203	Zayanta	Isaac Graham et al.	2,658.21	Patented August 19, 1870	Santa Cruz.

REPORT
OF THE
STATE BOARD OF EXAMINERS

TO THE
Twenty-Ninth Session of the Legislature of California.
1891.

STATE BOARD OF EXAMINERS:

R. W. WATERMAN, Governor.
WM. C. HENDRICKS, Secretary of State.
G. A. JOHNSON, Attorney-General.
S. P. MASLIN, Secretary.



SACRAMENTO:
STATE OFFICE, : : : : : J. D. YOUNG, SUPT. STATE PRINTING.
1890.

REPORT OF THE STATE BOARD OF EXAMINERS.

OFFICE OF THE STATE BOARD OF EXAMINERS, }
SACRAMENTO, December 1, 1890. }

To the Senate and the Assembly of the State of California:

We have the honor to herewith submit a report of the transactions of the State Board of Examiners, so far as the same is necessary for the information of the Legislature.

PURCHASE OF BONDS FOR THE USE AND BENEFIT OF THE STATE SCHOOL FUND.

The Board has not always been able to comply with the provision of Section 680 of the Political Code, which provides that whenever there is the sum of \$10,000 in the State Treasury to the credit of the State School Land Fund, that the Board shall invest the same in the Funded Debt Bonds of the State, or in the Bonds of the United States, or of the several counties of the State, because they were not always able to purchase bonds when there was money on hand.

Prior to 1883, the State Board of Examiners, whenever they had money with which to purchase bonds, advertised for sealed proposals. In this way the State got the advantage of competition and frequently purchased bonds below the market value. But in 1883 the law was amended, and the State has simply to wait until bonds are offered her, and she is compelled to pay the highest price for them, for a bondholder, for obvious reasons, would rather sell to a private party or bank than to the State, the price being the same. Also, owing to the very unstable condition of the money market in this State, the Board has not always been able to purchase bonds at the par value, and has at times paid considerable premium on them, over and above the par value; but the Board felt that it was to the best interest of the State School Fund that this money, which in the past two years has accumulated very rapidly, should bring a small interest to this fund, than that it should remain unused in the vaults of the State Treasury and the School Fund derive no benefit therefrom; for that would defeat the very object of our present system of the sale of school lands, which is, that the proceeds of the sale of State lands should go to the purchase of securities, etc., interest on which should be used for the maintenance of the common school system of this State, thus creating a perpetual source from which the support of our schools will be drawn. Below is the statement of

The Purchase of Bonds by the State Board of Examiners for the use and benefit of the State School Fund for the past two years.

September 20, 1889.

The Board purchased from the county of Los Angeles one hundred "County Court House" Bonds of said county, at the par value of \$1,000 each, issued August 2, 1889, and bearing interest at $4\frac{1}{2}$ per cent per

annum; the price being the par value of the bonds and accrued interest, the total sum paid being \$101,000.

January 20, 1890.

The Board purchased from John H. Grady one hundred and fifty bonds of the county of Santa Cruz, of the issue of 1885, of the par value of \$1,000 each, and bearing interest at the rate of $4\frac{1}{2}$ per cent per annum. The price paid was 1.05, and accrued interest, the total amount being \$158,437 50.

April 8, 1890.

The Board purchased through the Bank of D. O. Mills & Co. the following bonds of the county of San Diego: Nine bonds, of the par value of \$500 each; three bonds, of the par value of \$100 each, and eighty-seven bonds, of the par value of \$1,000 each; all bearing interest at the rate of 5 per cent per annum. The total par value of said bonds was \$91,800. The price paid by the Board was 1.02, and accrued interest. The total amount paid was \$94,885 50.

April 14, 1890.

The Board purchased from the county of Inyo thirty-three bonds of the county of Inyo, of the par value of \$500 each, bearing interest at the rate of 5 per cent per annum. The price paid by the Board was the par value of the bonds and the accrued interest, the total amount paid being \$16,568 75.

April 14, 1890.

The Board on this day, pursuant to the provisions of and order of the Board, adopted January 20, 1890, exchanged sixty-eight bonds of the county of Inyo, of the par value of \$500 each, issued July 15, 1884, and bearing interest at the rate of 7 per cent per annum, for sixty-eight bonds of the said county of Inyo, of the par value of \$500 each, issued March 15, 1890, and bearing interest at the rate of 5 per cent per annum. This exchange was made under the provisions of an Act of the Legislature of the State of California, approved March 18, 1885, and under the following notice issued by the Board of Supervisors of Inyo County:

NOTICE TO BONDHOLDERS OF THE BONDED INDEBTEDNESS OF INYO COUNTY, STATE OF CALIFORNIA.

Pursuant to an order of the Board of Supervisors of the county of Inyo, State of California, dated the eighth day of January, 1890, notice is hereby given to the holders or holder of existing bonds of the county of Inyo, State of California, that unless the said holders or holder of said bonds shall, within thirty days after the service of this notice, present the bonds held by him or them to the Board of Supervisors of said county, at the office of the Treasurer of said county, in the town of Independence, and consent to a reduction of the interest thereon to the rate of 5 per cent per annum, the said Board of Supervisors will proceed to cancel such bonds by the payment of the principal and interest thereon accrued.

Dated the fifteenth day of January, 1890.

P. H. MACK,
Clerk of the Board of Supervisors of Inyo County, State of California.

June 3, 1890.

This Board purchased thirty-four bonds of the county of San Diego (issue of 1886), of the par value of \$1,000 each, and bearing interest at

the rate of $4\frac{1}{2}$ per cent per annum. The price paid by the Board was 1.05, the total amount paid being \$36,350 25.

June 3, 1890.

The Board purchased sixty-four bonds of the county of Trinity, issue of 1889, of the par value of \$100 each, and bearing interest at the rate of 5 per cent per annum. The price paid was 1.07, and accrued interest. The Board also purchased three bonds of the above described issue, of the par value of \$250, at the same figure, making a total value of bonds purchased of \$7,150. The total amount expended in the purchase of these bonds was \$7,781 57.

June 17, 1890.

The Board purchased seventy-four bonds of the county of Merced, of the issue of 1887, of the par value of \$500 each, and bearing interest at the rate of $4\frac{1}{2}$ per cent per annum. The price paid for these bonds was 1.06, and accrued interest. The total amount paid was \$39,853 62.

December 5, 1890.

The Board purchased from the San Francisco Savings and Loan Society sixty-two bonds of the county of San Diego, of the issue of 1887, of the par value of \$1,000 each, and bearing interest at the rate of $4\frac{1}{2}$ per cent per annum. The price paid was $1.04\frac{3}{4}$, and accrued interest, the total amount paid being \$66,146 25.

BONDS HELD BY STATE TREASURER FOR STATE SCHOOL FUND.

The State Treasurer now holds in trust for the use and benefit of the State School Fund of this State bonds of the value of \$3,330,350, as follows:

State Funded Debt Bonds of 1873, 6 per cent.....	\$1,541,500 00
Sacramento County Bonds, $4\frac{1}{2}$ per cent.....	\$100,000 00
Sacramento County Bonds, 6 per cent.....	32,100 00
Sacramento County Bonds, 8 per cent.....	145,000 00
Sacramento County Bonds, 4 per cent.....	84,000 00
Humboldt County Bonds, 9 per cent.....	25,000 00
Santa Clara County Bonds, 4 per cent.....	86,000 00
Santa Clara County Bonds, 5 per cent.....	12,500 00
Fresno County Bonds, 6 per cent.....	51,000 00
Marin County Bonds, 5 per cent.....	72,000 00
Inyo County Bonds, 5 per cent.....	50,500 00
Yolo County Bonds, 5 per cent.....	43,000 00
Tehama County Bonds, 5 per cent.....	51,000 00
Napa County Bonds, 5 per cent.....	27,000 00
San Luis Obispo County Bonds, 5 per cent.....	16,000 00
San Luis Obispo County Bonds, 8 per cent.....	40,000 00
Mendocino County Bonds, 4 per cent.....	68,000 00
Santa Barbara County Bonds, 5 per cent.....	12,000 00
Los Angeles County Bonds, $4\frac{1}{2}$ per cent.....	255,000 00
Lake County Bonds, 5 per cent.....	47,800 00
San Diego County Bonds, 5 per cent.....	191,800 00
San Diego County Bonds, $4\frac{1}{2}$ per cent.....	96,000 00
Monterey County Bonds, 5 per cent.....	90,000 00
Santa Cruz County Bonds, $4\frac{1}{2}$ per cent.....	149,000 00
Trinity County Bonds, 5 per cent.....	7,150 00
Merced County Bonds, $4\frac{1}{2}$ per cent.....	37,000 00

These bonds have been purchased by the State Board of Examiners, under Section 680 of the Political Code, and the interest collected thereon goes to the support of the common schools of the State.

HISTORY OF THE BONDS PURCHASED FOR THE RELIEF OF THE FAMILY OF
JAMES SAULTRY.

James Saultry, a guard at the State Prison at San Quentin, in the discharge of orders from a superior officer—he being detailed to fire a salute from a cannon—had both arms blown off by a premature discharge of the cannon, thus being incapacitated for life from earning his living. The Legislature, of the twenty-fifth session, by an Act entitled “An Act for the relief of James Saultry, for the personal injuries received by him while in the service of the State,” approved March 3, 1883, appropriated \$20,000 for the relief of said Saultry. Said sum was invested by the State Board of Examiners in Santa Clara County 5 per cent bonds. These bonds were held in trust for James Saultry by the State Board of Examiners, who deposited them in the State Treasury for safe keeping, and the interest, collected thereon semi-annually, was paid to the said James Saultry as required by the above mentioned Act.

James Saultry died in 1888. The State Board of Examiners being officially informed of that fact on September 13, 1888, on which day the Board, “acting under the provisions of the above mentioned Act,” which provides “that upon his (Saultry’s) death, the said bonds shall be sold and the amount realized returned to the General Fund of the State Treasury,” purchased the above bonds for the use and benefit of the State School Fund, and turned the money received therefor (\$24,500) into the General Fund.

Upon the statement and representation, and in the belief that the injuries suffered by James Saultry resulted in, or at least hastened his death, the last Legislature passed an Act providing for the relief of the widow and the five minor children of the said James Saultry—which Act was approved March 14, 1889—and provided that the State Board of Examiners should invest the sum of \$25,000 in interest-bearing bonds, to be held in trust for said widow and minor children, and the interest thereon be paid them.

The Board for a long time were unable to invest this money without paying a large premium for the bonds, and as this would eat into the principal to be invested and thereby decrease the amount to be received by the said widow and minor children of James Saultry, the Board did not feel warranted in making such purchase.

In April, 1890, when the county of Inyo exchanged the 7 per cent bonds of 1884 for 5 per cent bonds of 1890, and the State Board of Examiners had agreed to buy the entire new issue of \$74,000, the first opportunity presented itself for making an advantageous investment of the \$25,000 held in trust by the Board for the said widow and minor children. The Board, on May 6, 1890, purchased from the county of Inyo twenty bonds of that county of the issue of 1890, bearing 5 per cent, and maturing in 1910, of the par value of \$1,000 each. These bonds are now held by the State Board, and are on deposit with the State Treasurer as the above mentioned Act requires.

JANUARY RECEIPTS.

The State Board of Examiners, at the counting of the money in the State Treasury on the twenty-fourth day of November, 1884, discovered that Arthur D. January, Deputy State Treasurer, had embezzled the sum

of \$39,542 27. January was arrested, and, after numerous delays and hinderances, he was convicted and sentenced to serve a term of imprisonment of ten years in the Folsom State Prison.

This money was placed in the hands of the State Treasurer by the Treasurers of the several counties of the State, to be held in trust for said Treasurers until such time as the law required that he should make a settlement with the State. Therefore the loss fell upon the Treasurers and not upon the State, and the Legislature in 1885 enacted the following Act:

In all cases where, prior to the passage of this Act, the County Treasurers of this State have deposited money in the State Treasury, and taken the receipt of the State Treasurer therefor, which receipt recites that the "deposit is to be applied in his next settlement with the State Controller," such receipt shall be received by the State Treasurer from any of such County Treasurers or their successors in office, for the sum named on the face of such receipt, in payment of any sum required by law to be paid to the State by any such County Treasurers, or their successors in office, or from any county they or either of them may represent.

Approved March 5, 1885.

Under this law the State Treasurer accepted such receipt as "cash," and they are now, and have been since April 1, 1885, in the State Treasury, and appear on the books as "cash," and are so counted by this Board at the monthly counts, made under the provisions of Section 676 of the Political Code.

This is not right. The receipts are not "cash." They are of the nature of a discharged liability. We therefore earnestly recommend that these receipts be canceled, and the State Board of Examiners be authorized and directed to cancel the same, and the State Treasurer and State Controller be authorized and directed to make such entries on their books as will show this cancellation.

Below is a statement showing the list of receipts held by the State Treasurer, the date of issue, to whom issued, amount, and date of redemption:

List of January Receipts held by State Treasurer.

DATE OF ISSUE.	No.	To Whom Issued.	Amount.	When Redeemed.
January 24, 1884..	4	J. Scott, Treasurer, Sierra Co.	\$139 48	.... April 25, 1885.
February 28, 1884..	13	S. Turner, Treasurer, Humboldt Co..	16,000 00	.... April 27, 1885.
April 23, 1884....	16	J. D. Skinner, Treas'r, El Dorado Co..	2,100 00	.... April 29, 1885.
April 25, 1884....	17	J. Scott, Treasurer, Sierra Co.	1,686 02	.... April 28, 1885.
April 29, 1884....	18	H. S. Turner, Treas'r, Humboldt Co..	568 95	.... April 27, 1885.
June 14, 1884....	20	U. Undart, Treas'r, S'ta Barbara Co..	936 08	.... June 29, 1885.
June 16, 1884....	21	Z. B. Pinkham, Treasurer, Mono Co..	906 93	.... February 1, 1886.
June 17, 1884....	23	Jas. Fowzer, Treas'r, Mendocino Co..	17,054 00	.... January 28, 1886.
June 17, 1884....	24	U. Hartnett, Treas'r, Monterey Co..	1,899 56	.... July 6, 1885.
August 19, 1884..	26	U. Undart, Treas'r, S'ta Barbara Co..	5,553 24	.... June 29, 1885.
August 21, 1884..	27	Wm. Jorres, Treas'r, San Diego Co..	3,769 92	.... July 6, 1885.
October 16, 1884..	28	R. B. Hathway, Treasurer, Contra Costa Co.	9,000 00	.... July 23, 1885.
January 18, 1884..	416	Jno. Cronkite, Treas'r, Alpine Co..	48 59	.... January 27, 1886.
Total			\$53,752 77	

DEFICIENCIES.

The very wise provision made by Section 5 of the "General Appropriation bill," passed by the last session of the Legislature, that the officers of the various departments, boards, commissions, and institu-

tions for whose benefit and support appropriations were made by said Act, were expressly forbidden to make any expenditure in excess of such appropriations, except the unanimous consent of the State Board of Examiners be first obtained, and a certificate in writing of the unavoidable necessity for such expenditure, has prevented many deficiencies from being, or attempted to be, created, and we strongly advise that a similar section be included in the next "General Appropriation bill." The amount of deficiency claims approved by this Board during the past two years is but \$42,017 53, a small amount when compared with the deficiencies presented to the Legislature in the past. The deficiency bills passed by the last session of the Legislature amounted to \$252,693 33. Of the amount of deficiency claims transmitted to your honorable bodies with this report, \$16,379 25 covers claims chargeable to appropriations made by the "General Appropriation bill" above mentioned; but with the exception of two claims incurred by the Secretary of State—the deficiency in the appropriation for the "purchase of ballot paper," \$4,968, and the deficiency in the appropriation for the "repairs to the State Capitol building and furniture," \$540 50—the appropriations are not under the control of any one department, Board, or officer, and it would be impossible to prevent the creation of such deficiencies or to apply the provision against the creation of such.

These deficiencies are as follows against the appropriation for:

Arrest and conviction of highway robbers, fortieth fiscal year.....	\$500 00
Arrest of criminals without the limits of the State, fortieth and forty-first fiscal years	311 35
Costs of suits in which the State is a party in interest, forty-first fiscal year ..	10,059 40
Repairs to State Capitol building and furniture, forty-first fiscal year.....	540 50
Purchase of ballot paper, forty-second fiscal year.....	4,968 00
Total	\$16,379 25

During the past two years but two applications have been made to this Board under the provisions of Section 5 of the General Appropriation bill, both of which were granted. We append below copies of the requests and authorizations:

PERMISSION GRANTED TO THE STATE TREASURER TO CREATE AN INDEBTEDNESS.

On June 17, 1890, the following request was received from the State Treasurer for permission to create and incur an indebtedness:

To the honorable State Board of Examiners of the State of California:

GENTLEMEN: On March 16, 1889, his Excellency Governor R. W. Waterman, approved an Act of the Legislature allowing me an additional clerk for the Treasury Department of this State for a limited period of six months, commencing in the month of January of each year.

Under such Act I duly appointed George Fetherstone, who thereupon entered upon the discharge of his duties of such clerk in my office. I have found him to be a competent, faithful, and energetic gentleman.

It appears, however, that the limited period specified by law is not sufficient to keep up with the requirements of my office. The business of the Treasury Department has so enormously increased, that it is practically impossible with my present force to keep up with the constantly increasing business. I am, therefore, reluctantly compelled to ask at the hands of your honorable Board to permit me to retain Mr. Fetherstone as such additional clerk in my office, until January, 1890, and that your honorable body will recommend to the coming Legislature of the State such salary for such period.

(Signed:)

ADAM HEROLD,
State Treasurer.

This request was duly considered, and permission granted to the State Treasurer to create such indebtedness, and the following order was adopted unanimously, signed, and ordered spread upon the minutes of the Board:

STATE OF CALIFORNIA,
OFFICE OF THE STATE BOARD OF EXAMINERS. }
SACRAMENTO, June 18, 1890.

The annexed request made by Adam Herold, State Treasurer, for permission to incur and create an indebtedness against the appropriation for the payment of an additional clerk in the office of the State Treasurer, has been examined by this Board, and all of the facts and circumstances connected therewith, and in our opinion additional help is necessary in the said office, and this Board does hereby unanimously consent and agree that the State Treasurer shall employ an additional clerk from July 1 to December 31, 1890, inclusive, at a salary not to exceed \$800, and this consent is hereby made the authorization for the State Treasurer to create such indebtedness.

(Signed:)

(Signed:)

(Signed:)

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R. W. WATERMAN, Governor,
W. C. HENDRICKS, Secretary of State,
G. A. JOHNSON, Attorney-General,
State Board of Examiners.

PERMISSION GRANTED THE COMMISSIONER OF THE BUREAU OF LABOR
STATISTICS TO CREATE AN INDEBTEDNESS.

SAN FRANCISCO, CAL., May 29, 1889.

Honorable State Board of Examiners, Sacramento, Cal.:

GENTLEMEN: For reasons herein set forth, I most respectfully request your sanction and authorization to incur an indebtedness against the State for the contingent support of this Bureau for the forty-first and forty-second fiscal years.

The biennial appropriation of \$1,000, heretofore allowed for this purpose, having been found inadequate, for reasons given in the reports of the Bureau, the last Legislature passed an Act which was approved by the Governor, increasing this to a sum not to exceed \$4,500 per annum.

The maximum amount was placed in the General Appropriation bill which passed the Legislature, but was disallowed by the Governor on the ground of being excessive. In consequence, the Bureau is left without any appropriation whatever for carrying on the incidental work for the next two years, and defraying absolutely necessary expenses. In this connection, I desire to call your attention to the passage of laws by the last Legislature relating to the employment of minors and females and to the sanitary conditions of factories and workshops, which impose extensive and onerous duties upon the Commissioner, in addition to his previous duties under the law.

For the proper enforcement of these laws and obtaining certain lines of statistics relating to females, I find an indispensable necessity for the employment of a lady assistant. It will be also necessary for me to employ an office boy at a small salary.

I therefore request your authorization to incur an indebtedness not to exceed half the maximum amount allowed under Section 10 of the Act amendatory of the "Act to establish and support a Bureau of Labor Statistics," which was approved February 8, 1889.

Very respectfully,

J. J. TOBIN,
Commissioner Bureau Labor Statistics.

STATE OF CALIFORNIA, }
Office of the State of Board Examiners. } ss.

SACRAMENTO, June 13, 1889.

WHEREAS, J. J. Tobin, Commissioner of the Bureau of Labor Statistics, having on this day submitted to this Board a statement showing the necessity for contingent expenses in the Bureau of Labor Statistics for the forty-first and forty-second fiscal years, and asking permission of this Board to incur an indebtedness of \$4,500 to carry on the work of the Bureau for the said fiscal years, there being no appropriation for that purpose. Said statement is hereunto attached and made a part of this authorization.

Now, therefore, this Board having duly considered said report or statement, and the facts and premises connected therewith, and being fully advised thereon, do find that said statement is in all things true and correct, and it is therefore determined by this Board that it is unavoidably necessary that such expenditure be made; and it is further ordered by this Board that J. J. Tobin be and is hereby authorized to create an indebtedness for the purpose of carrying on the work of the Bureau of Labor Statistics during the forty-first and forty-second fiscal years, not to exceed the sum of \$4,500.

This authorization shall be and serve as a certificate to said J. J. Tobin, Commissioner of the Bureau of Labor Statistics, to make such expenditure and to create such indebtedness against the State.

Done at the office of the State Board of Examiners, on the day above written.

R. W. WATERMAN, Governor,
W. C. HENDRICKS, Secretary of State,
G. A. JOHNSON, Attorney-General,
State Board of Examiners.

DEFICIENCY CLAIMS.

Following is a statement of all of the deficiency claims on file in this office approved by this Board, and herewith transmitted to the Legislature—a synopsis of their history and the reason of their approval:

Construction of granite steps on State Capitol Grounds-----\$1,938 12

The last Legislature provided for the removal of ten tiers of wooden steps and replacing them with granite steps, and appropriating \$17,920 for that purpose. On the statement made by the State Capitol Commissioners that the appropriation made was totally inadequate to complete one half of the work directed by the above mentioned Act to be done, and that the contraction of the indebtedness represented by these deficiency bills was necessary to complete the steps of the two most used approaches to the State Capitol building, this Board approved the claims, and do recommend that the same be paid.

The amount of the deficiency represents two claims—one of the Folsom State Prison for granite, \$1,858 60, and one of John D. Shearer, balance of bill for repairing the artificial stone pavements, for \$79 48.

Stationery, fuel, and lights, for the Legislature and State officers, for the fortieth fiscal year-----\$2,331 00

This deficiency was incurred in lighting the State Capitol during February and March, 1889—while the Legislature was in session. It was unavoidable and a necessity. The Board therefore approved the claim and recommends its payment.

Postage, expressage, and contingent expenses of Attorney-General for the fortieth fiscal year-----\$18 15

This claim was incurred in June, 1889, and is for postage, ice, and papers for the Attorney-General during the fortieth fiscal year. The appropriation for that year for that purpose was small and the indebtedness was incurred in the proper conduct of the office. The Board approves the claim and recommends that an appropriation be made with which to pay this claim.

Improvement of State grounds-----\$1,482 83

This deficiency represents the balance due William Gutenberger for four thousand nine hundred and seventy-six feet of five and six-inch pipe. This Board is not informed as to the necessity for such expenditure, but approved the claim upon the recommendation and approval of the State Board of Capitol Commissioners. We recommend that an appropriation be made to pay the same.

Use of the State Board of Forestry for the thirty-eighth fiscal year.—\$23 17

This claim was incurred in December, 1886, and was presented, with the approval of the State Board of Examiners, to the last two Legislatures, but, because of its unimportance, it was "left on the file" at the adjournments. We recommend that an appropriation be made to pay this bill, and cancel the obligation, so that this Board will not have its time taken up by its reconsideration.

Fuel, lights, postage, and incidental expenses of Board of Railroad Commissioners for the fortieth fiscal year.-----\$325 00

In 1888, in preparing the Ninth Annual Report of the Railroad Commission, that Commission asked the State Printer to have lithographed twelve hundred maps showing the railroads of the State. The State Printer refused to do the work, and the Board then had H. S. Crocker & Co. lithograph and print these maps, which were bound in the reports. This bill was presented to the last Legislature, with the approval of the State Board of Examiners, and the bill providing for its payment was "left on file" at the close of the session. We recommend that the same be paid, as it is a just and legal claim contracted by State officers.

Postage and expenses of the Supreme Court for the fortieth fiscal year.-----\$18 05

This deficiency is represented by a claim for postage and office supplies during the fortieth fiscal year. It is one of those small but unavoidable indebtednesses that must frequently occur where several officers have equal charge of an appropriation. The Board approves this claim, and recommends that an appropriation be made with which to pay the same.

Use of library of State Normal School at San José for the thirty-eighth fiscal year.-----\$79 98

This indebtedness was created in 1887 by the Trustees of the State Normal School at San José, under a misunderstanding as to their powers, and the same was presented to the last Legislature, with the approval of this Board, as a deficiency claim. An Act was passed and signed by the Governor providing for the payment of the same, when it was discovered that by an error "Los Angeles" was substituted for "San José" (Chap. 125, Stat. Cal. 1889, page 138), which rendered the Act useless, and the money appropriated thereby has not been and cannot be used. This Board therefore recommends that this error be corrected, and that an appropriation be made with which to pay this bill.

Payment of claims incurred under "An Act to promote drainage," approved April 23, 1880-----\$331 94

The last Legislature appropriated \$49,294 55 to pay the claims known commonly as the "drainage claims." This amount was based upon careful calculations made by this office and the office of the State Controller, and was intended to liquidate these claims, which have so persistently been presented to each Legislature for the past ten years for payment. But a slight error was made, and there still remains three claims, amounting in the aggregate to \$331 94. This Board has very

carefully examined these claims, and, inasmuch as they are "time checks" given by the engineers in charge of the drainage construction work—prima facie evidence of debt—the Board approves the same, and recommends that the same be paid.

These are the last of the "drainage claims." The Board also rejected one claim of this class, to which we call your attention, under the heading, "Rejected Claims."

Arresting criminals without the limits of the State for the fortieth and forty-first fiscal years ----- \$311 35

These are deficiencies in the extradition of fugitives from the justice of this State. This appropriation is under the control of no officer, and hence it is impossible to prevent the creation of indebtedness. An agent of the State, by the authority of the Penal Code, incurs expenses, and the State must pay the same, and there is no way to calculate the cost of any one extradition matter. The Board approves these claims, and recommends that the same be paid.

Expenses of suits in which the State is a party in interest for the forty-first fiscal year ----- \$10,059 40

This appropriation, like the one immediately preceding, is subject to the control of no one officer, and it is impossible to prevent deficiencies arising against it. The bills represented by this deficiency were properly and legally incurred, and are a charge against the State. The Board approves them and recommends their payment.

Support of the Insane Asylum at Stockton for the fortieth fiscal year ----- \$11,570 74

Owing to the large increase of patients received at this institution during the years 1888-9, and the fact that the asylum at Agnews was not able to receive patients as was intended, thereby increasing the amount necessary to support the Stockton Asylum, this deficiency was incurred. It was an unavoidable necessity. The Board approves the same and recommends its payment.

Salary of Secretary of the State Engineer for the fortieth, forty-first, and forty-second fiscal years ----- \$4,800 00

The last Legislature failed to appropriate money to pay the salary of the Secretary of the State Engineer, as provided by the Act creating the office, approved March 29, 1878, and the Act approved March 19, 1889, continuing the office in being. This class of claims does not properly come before this Board, as official salaries are exempted by Section 673 of the Political Code, from the operation of the provisions of the Code relating to the Board of Examiners. But we have approved this and several other claims of a like nature, and herewith transmit them to you, in order that you may have official knowledge of these deficiencies, and with the hope that such action will facilitate the business of the Legislature.

We recommend that appropriations be made to pay these official salaries, as they are authorized by law, and are just and legal claims against the State.

Salary of Executive Secretary of the Governor.....\$1,200 00

This deficiency is of the class referred to above. The last Legislature, by an Act approved March 19, 1889, increased the salary of the Executive Secretary from \$2,000 to \$2,600, but failed to make an appropriation to meet this increase.

We recommend that such an appropriation be made.

Salary of Commissioner of the Bureau of Labor Statistics, fortieth fiscal year.....\$135 00

Salary of Deputy Commissioner of the Bureau of Labor Statistics, fortieth fiscal year..... 67 50

The last Legislature increased the salaries of the Commissioner of the Bureau of Labor Statistics, and his deputy (Chap. X, Stat. of Cal., 1889, page 7), but failed to make appropriation to cover such increase. We recommend that such appropriation be made.

Contingent expenses of the Commissioner of the Bureau of Labor Statistics, fortieth, forty-first, and forty-second fiscal years...\$878 60

The appropriation made by the Legislature for contingent expenses of this department for the fortieth fiscal year was too meager to perform the duties required of the Commissioner, who incurred an indebtedness over and above the appropriation of \$14 90 for postage and other contingent expenses of his office for the year.

The last Legislature made an appropriation of \$10,000 for the contingent expenses of the Commissioner. This item in the General Appropriation bill was vetoed by the Governor, because it was thought to be excessive. This left the Commissioner practically helpless and useless, and this Board, on June 13, 1889, as more fully set forth in another part of this report, authorized the Commissioner to incur and create an indebtedness not to exceed \$4,500. The amount of indebtedness incurred under this authorization was only \$863 70, which we herewith transmit to you.

We approved these claims, and recommend that an appropriation of \$878 60 be made with which to pay the same.

Costs of suits against violators of the fish laws.....\$937 20

The Legislature in 1887 provided that the costs and expenses of all trials of persons charged with the violation of any of the provisions of any law of this State for the preservation of fish, and the cost of keeping and guarding such person, and the execution of the sentence of such person, should be borne and paid by the State. (Statutes of California, 1887, p. 5.) The last Legislature appropriated the sum of \$3,000 for such purpose, which was inadequate to pay all of such expenses.

This appropriation is under the control of no officer, but may be levied upon by any one who assists in the arrest or the conviction of any person charged with the violation of the fish laws of this State. The only safeguard the State has is, that the claim must be approved by the District Attorney of the county in which the trial takes place. We do not think the State is sufficiently protected in the disbursement of this appropriation, and we do not believe that any more convictions are had under

this system of paying the costs than when the counties paid them, and we therefore recommended that the Act above referred to be repealed.

Under this statute, there has been incurred during the thirty-ninth, fortieth, and forty-first fiscal years, claims aggregating \$937 20, as shown by the following:

List of claimants of deficiency claims against the appropriation for the payment of costs and expenses of trials of persons violating the laws for the preservation of fish.

Fiscal Year.	NAME.	Service.	Amount.
39th	Carlton Rickards	Interpreter	\$15 00
39th	John D. Ingersoll	Justice	24 00
39th	D. D. Wills	Justice	6 00
39th	C. A. Sweeney	Constable	22 50
40th	J. S. Bellrude	Justice	69 00
40th	Rees Jones	Constable	61 75
40th	J. B. Fiscas	Constable	52 20
41st	W. H. Mills	Justice	122 00
41st	Maurice Byrnes	Constable	26 25
41st	E. L. McGarity	Constable	119 50
41st	E. F. Grant	Witness	40 00
41st	P. J. Roquet	Witness	16 25
41st	David Bennett	Witness	16 00
41st	D. W. Schofield	Witness	23 00
41st	George Young	Witness	19 25
41st	Frank Morton	Witness	23 00
41st	William Armstrong	Witness	16 75
41st	Joseph Dominici	Witness	16 75
41st	J. J. Young	Witness	19 25
41st	Thomas Hammill	Witness	20 50
41st	J. E. Burt	Witness	19 25
41st	R. J. Pearlee	Witness	16 00
41st	Frank Young	Witness	19 25
41st	John Stockel	Witness	20 50
41st	James Donohue	Witness	20 50
41st	C. A. Spurrier	Witness	16 00
41st	M. F. Dominici	Witness	19 25
41st	J. C. Fleming	Witness	20 25
41st	L. A. Stevens	Witness	16 00
41st	J. R. Fleming	Witness	20 25
41st	Richard Gannon	Witness	16 00
41st	C. W. McMaster	Notary	5 00
	Total		\$937 20

The Board has approved these claims, and recommends that an appropriation be made of \$937 20 with which to pay the same.

Repairs to the State Capitol and furniture, forty-first fiscal year. - \$540 50

This deficiency was caused by an oversight in not withholding sufficient money to pay the claims of the plasterers employed on the State Capitol. The work was performed in December, 1889, and January, 1890, and the bill was not presented to the Secretary of State until September, 1890, and in the meanwhile the appropriation had been used for other purposes. It was an oversight, and one for which no one can be held blamable, and the work has been performed and accepted by the Secretary of State.

We have approved the same, and recommend that an appropriation be made to pay this claim.

Purchase of ballot paper, forty-second fiscal year----- \$4,968 00

This deficiency covers a bill of Blake, Moffitt & Towne for two thousand and four hundred and eighty-four reams of ballot paper, purchased by the Secretary of State, for use at the last general election, to which is attached the following explanation:

OFFICE OF SECRETARY OF STATE, }
SACRAMENTO, August 1, 1890.

On June 1, 1890, there was on hand ballot paper amounting to one thousand seven hundred and forty reams, purchased at \$2 20 per ream, and sold for \$2 50 per ream. There being some question as to whether any of the paper could be used at the ensuing election for State officers, on account of the fact that the last Legislature had so amended the election laws as to change the size of tickets to be used, and consequently entailing a loss upon buyers of paper, it was deemed advisable to order sufficient paper to cover this emergency. Judging by past experience, and allowing an additional amount for natural increase in the consumption of paper, four thousand reams were ordered with the understanding that an additional amount might be added to make up carload rates from the East, making the amount received four thousand four hundred and eighty-four reams, and bought for \$2 and sold for \$2 25. Up to September 1, 1890, one hundred and seventy-three reams of the one thousand seven hundred and forty reams on hand June first had been sold, and the new paper was not placed upon the market until demanded by consumers. Instead of an increase in the amount of paper sold, there was a heavy decrease. Had there been no paper of the old stock referred to sold, and the natural increase in paper consumed, there would have been on hand at this time barely sufficient to supply the needs of local elections until additional appropriations were made.

W. C. HENDRICKS,
Secretary of State.

Upon this showing the Board approved this claim, and attached thereto the following statement of approval:

STATE OF CALIFORNIA, }
OFFICE OF THE STATE BOARD OF EXAMINERS, }
SACRAMENTO, December 8, 1890.

As I understand, the ballot paper on hand could not be sold readily on account of the change in the law making the ballots larger, and entailing a waste in using this paper. On this account, other paper was ordered to which this objection would not apply; and although the estimate of the amount needed was too large, yet it was purchased in good faith by the Secretary of State, who, having sold about three thousand reams in 1888, and on the basis of the difference between that sale and the sale two years previous, supposed that an increase of about one thousand reams more would be necessary for the last election. I am of the opinion that the bill of Blake, Moffitt & Towne should be allowed. It is always better to have too much of ballot paper, involving as it does the exercise of the right of suffrage, than by an error of judgment to have too little. Besides, the paper can be used at future elections without involving much if any loss to the State, unless the law is changed. The last paper purchased was sold at 25 cents on the ream less than that of the paper on hand, which cuts exactly under the change of the law, and making the paper more salable than the old paper. Besides, some special election might occur rendering it necessary to have sufficient ballot paper on hand for that purpose.

G. A. JOHNSON,
Attorney-General.

I concur in the above statement and approval.

R. W. WATERMAN,
Governor, and Chairman of Board of Examiners.

We herewith transmit this claim to your honorable bodies, with this statement of our approval, and recommend that an appropriation be made with which to pay the same.

Below will be found a

Statement Showing Amount of Deficiency Claims Approved by the State Board of Examiners,

And, under Section 663 of the Political Code, transmitted to the Legislature, with the recommendation that appropriations be made with which to pay the same:

Construction of granite steps in State Capitol grounds	\$1,988 12
Stationery, fuel, and lights, fortieth fiscal year	2,331 00
Improvement of State Capitol grounds	1,483 83
Use of State Board of Forestry, thirty-eighth fiscal year	23 17
Incidental expenses of Railroad Commissioners, fortieth fiscal year	325 00
Postage and expressage of Supreme Court, fortieth fiscal year	18 05
Use of library at State Normal School at San José, thirty-eighth fiscal year	79 98
Claims incurred under "Drainage Act"	331 94
Arrest of criminals without the limits of the State, fortieth and forty-first fiscal years	311 35
Costs of suits in which the State is a party in interest, forty-first fiscal year	10,059 40
Support of Stockton Insane Asylum, fortieth fiscal year	11,570 74
Salary of Secretary of State Engineer, fortieth, forty-first, and forty-second fiscal years	4,800 00
Salary of Executive Secretary to the Governor, forty-first and forty-second fiscal years	1,200 00
Costs of suits against the violators of the fish laws	937 20
Repairs to State Capitol building and furniture, forty-first fiscal year	540 50
Purchase of ballot paper, forty-second fiscal year	4,968 00
Salary of Commissioner of Bureau of Labor Statistics, fortieth fiscal year	135 00
Salary of Deputy Commissioner of Bureau of Labor Statistics, fortieth fiscal year	67 50
Contingent expenses of Commissioner of Bureau of Labor Statistics, fortieth, forty-first, and forty-second fiscal years	878 60
Postage, expressage, etc., Attorney-General fortieth fiscal year	18 15
Total	\$42,017 53

CLAIMS APPROVED BY THE STATE BOARD OF EXAMINERS FOR WHICH NO APPROPRIATIONS HAVE BEEN MADE.

We have further to report that there has been filed in this office during the past two years certain claims of an equitable nature for the payment of which no appropriations have been made. The claims were filed under the provisions of Section 664 of the Political Code. We have carefully examined and considered them, and have approved the following, amounting in the aggregate to \$4,080 65, which we herewith transmit to your honorable bodies with our statements of approval attached thereto. We submit below a copy of decision in each case, showing reasons for our approval:

Jesse A. Galland, Journal Clerk of the Senate, Twenty-eighth Session\$240 00

Decision: The annexed claim, presented by Jesse A. Galland, was incurred in completing the Journal of the Senate of the twenty-eighth session of the Legislature. Jesse A. Galland was Journal Clerk of the Senate, and at the adjournment of the Legislature the Journal of the Senate was unfinished. The Senate, by resolution, ordered the Journal Clerk and his assistants to remain at the Capitol after the adjournment of the Legislature and finish the Journal, and deliver the same to the Secretary of State, and provided for fourteen days' pay for such services. At the expiration of the fourteen days the Journal was still unfinished. Mr. Galland employed assistants and staid until April 30, 1889—thirty days over the fourteen days authorized by the Senate.

Mr. Galland was a sworn officer of the Senate and was legally obliged to finish his work, *id est*, write in long-hand the Journal of the Senate and deliver the same to the Secretary of State. Mr. Galland performed this work, which required thirty days over and beyond the number of extra days allowed by the Senate, and this Board believes him to be entitled to compensation for such work. The Board therefore approves this claim for \$240, and herewith transmits the same to the

honorable Senate and Assembly of the State of California, in the twenty-ninth session convened, with this their statement of approval, and the recommendation that an appropriation be made to pay the same.

SACRAMENTO, September 30, 1890.

William J. Hardy, Assistant Journal Clerk of the Senate,
Twenty-eighth Session ----- \$200 00

Decision: The annexed claim of William J. Hardy was incurred in completing the Journal of the Senate of the twenty-eighth session of the Legislature. The Senate ordered, by resolution, the Journal Clerk to remain at the Capitol and finish the Journal, and provided for pay for fourteen days for himself and assistants. Upon the expiration of the fourteen days the assistants ceased all work upon the Journal. The Journal Clerk then employed William J. Hardy and Isidor Alexander to assist him in completing the work, which required twenty-five days' time additional.

This Board finds upon an examination of the facts and circumstances connected with this claim, that the employment of assistance by the Journal Clerk was necessary; the Board, therefore, approves this claim, and herewith transmits it to the honorable Senate and Assembly of the State of California, in twenty-ninth session assembled, with this their statement of approval, and the recommendation that an appropriation be made with which to pay the same.

SACRAMENTO, September 30, 1890.

Isidor Alexander, Assistant Journal Clerk of the Senate, Twenty-
eighth Session ----- \$200 00

Decision: The annexed claim of Isidor Alexander was incurred in completing the Journal of the Senate of the twenty-eighth session of the Legislature.

The Senate ordered, by resolution, the Journal Clerk and his assistants to remain at the Capitol after the adjournment of the Legislature and finish the Journal and deliver the same to the Secretary of State, and provided for the payment of the Journal Clerk and his assistants for fourteen days. Upon the expiration of the fourteen days the assistants ceased all work upon the Journal, and the Journal Clerk then employed Isidor Alexander and William J. Hardy to assist him in completing the Journal, which required twenty-five days.

This Board finds upon examination of the facts and circumstances connected with this claim that the employment of assistance by the Journal Clerk was necessary. The Board of Examiners therefore approves this claim, and herewith transmits it to the honorable Senate and Assembly of the State of California, in the twenty-ninth session convened, with this their statement of approval, and the recommendation that an appropriation be made with which to pay the same.

SACRAMENTO, September 30, 1890.

G. A. Johnson, Attorney-General ----- \$1,000 00

Decision: The annexed claim, presented by G. A. Johnson, who, at the direction of the Legislature of California went to Washington, D. C.,

and assisted in briefing and orally arguing an United States case, to wit: The case of Chae Chan Ping vs. the United States, in the Supreme Court of the United States, and which case was decided favorably to the wishes of the people of the State of California, and the Exclusion Act of October 1, 1888, was upheld by said Court, is hereby approved by the State Board of Examiners, who believe that the said Johnson should receive the same amount as was appropriated in favor of Stephen M. White and John F. Swift each, as it was not a case which it was his duty as Attorney-General to attend to, being an United States case, and the State of California not being a party thereto, and the sum of \$1,000 should be appropriated in his favor, so as to equalize his pay with the pay of said White and Swift, respectively, and they herewith transmit it to the honorable Assembly and Senate, with this their statement of approval and recommendation that an appropriation be made with which to pay the same.

SACRAMENTO, September 30, 1890.

J. J. Crawford, member of Examining Commission on Rivers and Harbors -----\$181 15

Decision: The annexed claim, presented by J. J. Crawford, for expenses as member of the Examining Commission on Rivers and Harbors, for \$181 15, is presented under an Act of the Legislature approved March 19, 1889.

The Legislature provided for the creation of the Examining Commission on Rivers and Harbors, and provided that "each member of said Commission shall receive a salary of two thousand four hundred dollars per annum, and his traveling expenses while engaged in the performance of official duties," but failed to make an appropriation to pay such expenses.

These expenses were incurred under the authority of the Act above referred to, and the bill is a legal charge against the State, and the State Board of Examiners do hereby approve the same, and do hereby transmit it to the honorable Senate and Assembly of the State of California, with this their statement of their approval and recommendation that the Legislature make an appropriation with which to pay the same.

SACRAMENTO, September 30, 1890.

C. E. Grunsky, member of the Examining Commission on Rivers and Harbors -----\$77 15

Decision: The annexed claim, presented by C. E. Grunsky, for expenses as "member of the Examining Commission on Rivers and Harbors," for \$77 15, is presented under an Act of the Legislature approved March 19, 1889.

The Legislature provided for the creation of the "Examining Commission on Rivers and Harbors," and provided that "each member of said Commission shall receive a salary of two thousand four hundred dollars per annum, and his traveling expenses while engaged in the performance of official duties," but failed to make an appropriation for such expenses. The Board was authorized by law to incur these expenses, hence this bill is a legal charge against the State, and the State Board of Examiners hereby approves the same, and do hereby transmit it to

the honorable Senate and Assembly of the State of California, with this their statement of approval and recommendation that the Legislature make an appropriation with which to pay the same.

SACRAMENTO, September 30, 1890.

Henry Hogan ----- \$150 00

Decision: The annexed claim presented by Henry Hogan for \$150 for professional services, was incurred under the order and direction of the State Board of Fish Commissioners, who are authorized to prosecute violators of the laws protecting the game of the State, but no appropriation has ever been made to pay the costs and expenses of suits instituted by them for this purpose, and as the District Attorney of Napa County, where the suit upon which this claim is based was commenced, advised against the prosecution, the Board of Fish Commissioners felt it necessary to employ as special counsel Henry Hogan, to prosecute the case. The Board of Examiners hereby approves the claim, and herewith transmits it to the Legislature with the recommendation that the same be paid.

SACRAMENTO, September 30, 1890.

C. C. Rochford, ex-Sheriff of Modoc County ----- \$603 15

Decision: The annexed claim, presented by C. C. Rochford, was approved by the State Board of Examiners on December 28, 1888, and transmitted to the Legislature. The bill providing for the payment of this claim passed the Assembly unanimously, and was "left on the file," by the adjournment of the Legislature, in the Senate.

The history of this claim is as follows (extract from the Report of the State Board of Examiners, to the Legislature, twenty-eighth session):

On August 1, 1883, one Grey Utley was murdered by one J. R. Franklin, who fled from this State into the State of Oregon. Mr. Rochford, who had lately been elected Sheriff of Modoc County, and was unversed in the modes of proceeding in such cases, and who felt that his only duty in the premises was to pursue and capture the murderer, followed the said J. R. Franklin into the State of Oregon and arrested him, and, without a requisition, brought him back into this State, where he was tried and convicted of the said crime. Mr. Rochford, in his inexperience, thought that the county would pay his expenses, but the county refused to do so, claiming that it was a charge against the State. He therefore presented his bill of expenses to the State, but as the appropriation "for the arrest of criminals without the limits of the State" was made to provide for the payment of the accounts of authorized agents of the State, under Section 1557 of the Penal Code, which reads: "When the Governor of this State, in the exercise of the authority conferred by section two, article four, of the Constitution of the United States, or by the laws of this State, demands from the executive authority of any State of the United States, or of any foreign Government, the surrender to the authorities of this State of a fugitive from justice, who has been found and arrested in such State or foreign Government, the accounts of the person employed by him to bring back such fugitive must be audited by the Board of Examiners, and paid out of the State Treasury," and as Mr. Rochford was not an authorized agent of the State, acting under a commission of the Governor of California to receive from the proper authorities of Oregon and convey back to this State the person of J. R. Franklin, the Board of Examiners refused to allow the claim.

As Mr. Rochford was at fault only through inexperience, and as he fearlessly did his duty and brought the guilty to punishment, we do not believe he should financially suffer, and we believe that the claim is a just one.

The Board of Examiners believe this to be a just claim against the State; they therefore approve the same, and herewith transmit it to the honorable Senate and Assembly with this their statement of approval

and recommendation that an appropriation be made with which to pay the same.

SACRAMENTO, September 30, 1890.

The "California Spirit of the Times"..... \$300 00

Decision: The annexed claim for \$300, presented by the "California Spirit of the Times," is for advertising the "General Election" Proclamation.

The law requires that the Governor shall issue the proclamation and send copies of the same to the Boards of Supervisors of the different counties, who *may*, in their discretion, publish it. It is not obligatory upon them. In the judgment of the Governor the publication of the proclamation calling for a "General Election" should be more generally made, and with that end in view he ordered the proclamation printed in the "California Spirit of the Times," and freely distributed the paper among the county officers and the citizens of the State. As the expense was incurred by and under the direction of the Governor, we believe the bill to be a just claim against the State, and we herewith transmit the same to the honorable Senate and Assembly of the State of California, in twenty-ninth session convened, with this our statement of our approval and recommendation that an appropriation be made to pay the same.

SACRAMENTO, November 15, 1890.

His Imperial Japanese Majesty's Government.....\$920 20

Decision: The annexed claim of His Imperial Japanese Majesty's Government for expenses incurred in the extradition of Calvin Pratt, a fugitive from the justice of this State, who sought refuge in Japan, and who was arrested and delivered up to the authorities of this State by Japan, although at that time there was no extradition treaty between Japan and the United States. The entire extradition matter and return of Pratt was entirely a comity upon the part of Japan, in which that Government expended the sum of 928.84 yens, the equivalent of \$920 20. This is a debt of honor on the part of this State, and should be paid as soon as possible. We herewith transmit it to the Legislature with this our approval and recommendation that the sum of \$950 or \$1,000 be appropriated with which to pay the same, and the expense of transmitting the money to Japan.

SACRAMENTO, September 30, 1890.

Henry Mahler, Superintendent of Marshall's Monument\$182 00

Decision: The annexed claim, presented by Henry Mahler, was incurred as Superintendent of the improvement of the grounds around the monument erected to James W. Marshall, the discoverer of gold in California.

Mr. Mahler was employed by the monument Commissioners as Superintendent of the work, at five dollars (\$5) per diem. After all the other claims had been paid it was found that the balance would not pay the claim of Mr. Mahler, so the Commissioners, by agreement, allowed him all the balance the appropriation would permit, or at the rate of three dollars (\$3) per day. Mr. Mahler performed the services required

of him in good faith, and this Board believes he is entitled to the balance due him on the contracted price, \$5. The Board therefore approves this claim for \$182, and herewith transmits the same to the honorable Senate and Assembly of the State of California, in the twenty-ninth session convened, with this their statement of approval, and the recommendation that an appropriation be made to pay the same.

SACRAMENTO, September 30, 1890.

James A. Kearney, ex-Sheriff of San Benito County-----\$27 00

Decision: The annexed claim, presented by James A. Kearney, for \$27, was incurred by the conveyance of Andrew Irwin from the State Prison at San Quentin to Hollister, the county seat of San Benito County, upon the authority of an order for a new trial, issued December 20, 1888, by James F. Breen, Judge of the Superior Court in and for the County of San Benito.

Section 178 of the "County Government bill" provides that the Sheriff "shall receive all expenses necessarily incurred in conveying persons to and from the State Prisons, which shall be allowed by the State Board of Examiners, and collected from the State." The appropriation for the transportation of prisoners for the fortieth fiscal year was only for conveying them to the State Prisons; hence this claim could not be paid from that appropriation. It is, however, a legal claim against the State, authorized by the above mentioned section of the "County Government bill," and, therefore, the State Board of Examiners approves the same and transmits it herewith to the honorable Senate and Assembly, with this statement of their approval and recommendation that an appropriation be made with which to pay the same.

SACRAMENTO, September 30, 1890.

List of Claims Approved by the State Board of Examiners, for the payment of which no Appropriations have been made.

Jesse A. Galland, completing Journal of Senate, twenty-eighth session of Legislature	\$240 00
Wm. J. Hardy, completing Journal of Senate, twenty-eighth session of Legislature	200 00
Isidor Alexander, completing Journal of Senate, twenty-eighth session of Legislature	200 00
G. A. Johnson, fee for services in the Chae Chang Ping case	1,000 00
J. J. Crawford, expenses as member of River and Harbor Commission	181 15
C. E. Grunsky, expenses as member of River and Harbor Commission	77 15
Henry Hogan, special counsel of Board of Fish Commissioners	150 00
C. C. Rochford, extradition expenses in case of Grey Utley	603 15
The "California Spirit of the Times," publication of election proclamation	300 00
His Imperial Japanese Majesty's Government, extradition expenses of Calvin Pratt	920 20
Henry Mahler, Superintendent of Marshall Monument improvement	182 00
James A. Kearney, ex-Sheriff of San Benito County, conveying Andrew Irwin	27 00
Total	\$4,080 65

REJECTED CLAIMS.

We have also to report that this Board has, during the past two years, rejected and disapproved claims aggregating the sum of \$55,626, and we herewith transmit to your honorable bodies full and complete statement in each case, and the reasons for the action taken thereon.

Bartolo Sepulveda, reward for false imprisonment\$50,000

Decision: The annexed claim presented by Bartolo Sepulveda, for false imprisonment, in the sum of \$50,000, is hereby rejected and disallowed, under Section 662 of the Political Code, for the following reasons:

The said Sepulveda bases his claim upon the fact that he was pardoned by Governor Stoneman from the State Prison for the crime of murder, the Chief Executive holding that said Sepulveda was wholly innocent of the crime for which he was incarcerated. This Board does not believe that the opinion and action of the Chief Executive in this matter is sufficient grounds upon which to base a claim for false imprisonment. If the officers of the law and the State represented by her officers wrongfully imprisoned the claimant, this Board holds that the proper Court should decide so, and that the proper Court should fix the damage or the amount that should be paid the said claimant for such false imprisonment.

The Board of Examiners, therefore, refuse to approve said claim, and do hereby reject and disapprove it, and suggest that the claimant should petition the Legislature to grant him leave to sue the State for the alleged false imprisonment. This would bring the matter before the proper tribunal, and the interest of the State would be protected, while the claimant would have full opportunity to show wherein damage has been done him.

John C. Doherty\$746 00

Decision: The annexed claim, presented by John C. Doherty, for amount claimed to be due him for work done by direction of the Secretary of State in 1856, is hereby rejected and disallowed, under Section 662 of the Political Code, for the following reasons:

The claim is submitted without any of the proofs required by law and this Board, and this Board thinks that the neglect of the claimant in not endeavoring to collect this money before, if due him, should act as a bar against the claimant. This Board has no evidence that this is a legal claim against the State, and hence refuses to approve the same.

Frank Mahon, ex-Bookkeeper, State Printing Office\$280 00

Decision: The annexed claim, presented by Frank Mahon for extra services rendered during the session of the Legislature of the year 1887, is hereby rejected and disallowed, under Section 662 of the Political Code, and for the following reasons, to wit: *

The Board of Examiners rejected this claim in 1888, when it was presented for action, holding that "Mr. Mahon was employed as bookkeeper in the office of the Superintendent of State Printing, at a yearly salary of \$2,100, and any extra work—if such work could be said to have been done in an office where there is a fixed yearly stipend—was covered by the salary, and therefore he was not entitled to receive any compensation for such service which, as bookkeeper, he was called upon to perform." Section 670 of the Political Code provides that "the Board must not entertain for a second time a demand against the State once rejected by it, or by the Legislature, unless such facts are presented to the Board, as in suits between individuals, would furnish ground for granting a new trial," and as no such new facts have been presented to

this Board in this matter, Mr. Mahon, the claimant, has no legal standing or right to present such claim a second time.

The Estate of A. J. Webster \$3,000 00

Decision: The annexed claim, presented by the estate of A. J. Webster, deceased, for timber and brush used in making Bear River Brush Dam, \$3,000, is hereby rejected and disallowed under Section 662 of the Political Code, for the following reasons, to wit:

The Legislature, by a joint committee, and the State Board of Examiners, have made exhaustive investigation into the legality of claims known as the "Drainage Claims." Extensive advertising has been done to get all claimants to file claims so they could be considered. In spite of all this the annexed claim was not presented, and its existence wholly unknown until the middle of the year 1889, when it was sent by mail to this Board, with no letter or communication to show who sent it, and accompanied by the affidavit of two men who were not connected with the Drainage Commission. The records of the Commission and the evidence of other claimants does not show that any work was ever done by the Drainage Commission upon the lands of the late A. J. Webster, or that any injury was inflicted thereto. Furthermore, the claim is not itemized in the least.

The Board of Examiners do not believe this claim to be a legal charge against the State, and that the neglect of the claimant to present the same before should act as a bar to its consideration, had it been legal and just.

John Butler, Sheriff of Placer County \$300 00

Decision: The annexed claim, presented by John Butler, for reward for the arrest and conviction of H. L. Gorton, is hereby rejected and disallowed, under Section 662 of the Political Code, for the following reasons, to wit: John Butler is Sheriff of the county of Placer, and arrested the said Gorton on a warrant sworn out by J. N. Thacker, who worked up the case and secured all of the testimony which resulted in a conviction of H. L. Gorton for highway robbery. Mr. Butler simply performed an official duty, and has no legal or equitable claim against the State for the reward paid for the arrest and conviction of the said H. L. Gorton.

SACRAMENTO, January 20, 1890.

Jenness True \$300 00

Decision: The annexed claim, presented by Jenness True, for one fourth ($\frac{1}{4}$) of the reward for the arrest and conviction of H. L. Gorton, is hereby rejected and disallowed, under Section 662 of the Political Code, for the following reasons, to wit:

This claim is made for the reward provided for in an Act of the Legislature entitled "An Act imposing certain duties upon the Governor of the State," approved April 3, 1876, which provides for a standing reward for the arrest and conviction of highway robbers. The claimant gave information regarding the said H. L. Gorton in his connection with the Cazadero stage robbery, for which no conviction was had, and therefore the claimant has, under the Act above referred to, no legal claim against

the State for the standing reward for the arrest and conviction of highway robbers.

SACRAMENTO, January 20, 1890.

Joe P. Johnson, Post Office Inspector -----\$300 00

Decision: The annexed claim, presented by Joe P. Johnson, for the reward for the arrest and conviction of H. L. Gorton, is hereby rejected and disallowed, under Section 662 of the Political Code, for the following reasons, to wit: The Act of the Legislature entitled "An Act imposing certain duties upon the Governor of the State," approved April 13, 1876, provides that the Governor shall offer a standing reward for the *arrest and conviction* of highway robbers. The said Joe P. Johnson arrested the said H. L. Gorton for participation in the Cazadero stage robbery, for which no conviction was had—the said Gorton having been convicted of robbing the train at Clipper Gap—and as the above Act referred to further provides that "no reward shall be paid except after such conviction," the claimant, Joe P. Johnson, has no legal claim against the State for the reward for the Clipper Gap train robbery.

SACRAMENTO, January 20, 1890.

E. P. Palmer -----\$300 00

Decision: The annexed claim, presented by E. P. Palmer, for the reward for the arrest and conviction of William Springer, is hereby rejected and disallowed, under Section 662 of the Political Code, for the following reasons, to wit: The Chief Executive of this State on January 20, 1887, offered a reward for the arrest and conviction of William Springer, who murdered his wife, Katharine Handorff, at the Transcontinental Hotel, Colton, San Bernardino County, on the night of January 5, 1887, of two hundred and fifty (\$250) dollars. On the fifth of November, 1888, the said E. P. Palmer found the decayed remains of a man among the hills lying north of the city of San Bernardino, which were found by the Coroner's jury to be those of the said William Springer, who met his death by a pistol fired by his own hand, and as the said William Springer was not arrested by the said E. P. Palmer, and was not convicted upon the charge of murder for which the reward was offered, the said E. P. Palmer has no legal claim against the State whatever.

SACRAMENTO, November 20, 1889.

S. A. Leary, Emmet Hart, and Lawrence Paulson -----\$300 00

Decision: The annexed claim of S. A. Leary, Emmet Hart, and Lawrence Paulson, for the reward for the arrest and conviction of Joe Frey, a highway robber, is hereby rejected and disallowed, under Section 662 of the Political Code, for the following reasons, to wit: The said Joe Frey was charged, on May 11, 1888, before John Brown, Justice of the Peace in and for the township of Santa Rosa, county of Sonoma, with the crime of murder, and also by separate complaints with the crime of robbery. Upon the latter charge the said Frey was never tried, but was tried and convicted of the first charge—murder—and on the first day of September, 1888, was sentenced to undergo a term of imprisonment in the State Prison at San Quentin for the term of twenty-five years, and

as the reward offered by virtue of and in accordance with the provisions of an Act entitled "An Act imposing certain duties upon the Governor of the State," approved April 3, 1876, is to be paid "immediately upon the conviction of the person or persons so arrested," and as the Act further provides that "no rewards shall be paid except after conviction," the said claimants, S. A. Leary, Emmet Hart, and Lawrence Paulson, have no legal claim against the State for such reward until after the conviction of the said Joe Frey of the crime of highway robbery.

SACRAMENTO, November 20, 1889.

Board of Trustees of the State Normal School\$100 00

Decision: The annexed claim, presented by the Board of Trustees of the State Normal School at Chico for \$100, "to be used as a 'petty cash' account to pay current expenses," and sought to be drawn from the appropriation for the support of the State Normal School at Chico for the forty-first fiscal year. This appropriation is included in the Act of the Legislature entitled "An Act making appropriations for the support of the Government of the State of California for the forty-first and forty-second fiscal years," approved March 21, 1889, and commonly known as the "General Appropriation bill," which provides that "the Board of Examiners is hereby expressly prohibited from allowing any demands payable out of such appropriation until the same are presented in itemized form, stating specifically the service rendered, by whom performed, time employed, distance traveled, and necessary expenses thereof; if for articles purchased, the name of the article, together with the price paid for each, and of whom purchased, with the date of purchase," and as this claim is not so itemized, and from the nature of the demand cannot be so itemized, we decline to approve it.

SACRAMENTO, January 20, 1890.

List of Claims Rejected and Disallowed by the State Board of Examiners.

Bartolo Sepulveda, false imprisonment.....	\$50,000 00
John C. Doherty, services performed by order of Secretary of State in 1856....	746 00
Frank Mahon, services as bookkeeper, State Printing Office.....	280 00
Estate of A. J. Webster, damage by Debris Commission.....	3,000 00
John Butler, reward for arrest and conviction of highway robbers.....	300 00
Jenness True, reward for arrest and conviction of highway robbers.....	300 00
Joe P. Johnson, reward for arrest and conviction of highway robbers.....	300 00
E. P. Palmer, reward for arrest and conviction of Wm. Springer.....	300 00
S. A. Leary, Emmet Hart, and Lawrence Paulson, reward for arrest and conviction of highway robbers.....	300 00
Trustees of State Normal School at Chico, incidental expenses.....	100 00
Total	\$55,626 00

SPECIAL AND EXTRAORDINARY CLAIMS.

Under this caption we submit for your careful consideration three claims, differing materially from the ordinary claims presented to this Board for consideration and action. We append the entire bills, with the full report of the action of this Board.

Claim of G. B. Montgomery.

DECEMBER 20, 1890.

The State of California to G. B. Montgomery, Dr.

To legal services performed in the prosecution of John T. Prewitt, charged with the murder of Dr. A. W. Powers. Two trials were had, each of which consumed about

three weeks, and about one hundred witnesses were subpoenaed, and for which I have been paid by the State only \$300.

I respectfully ask the honorable Board of Examiners to recommend the Legislature to make such allowance to said G. B. Montgomery as they may think his services are reasonably worth.

(Signed:)

G. B. MONTGOMERY.

To this petition the following approval and recommendation was made:

STATE OF CALIFORNIA,
OFFICE OF THE STATE BOARD OF EXAMINERS, }
SACRAMENTO, December 27, 1890.

The undersigned recommend to the Legislature of California that an appropriation be made in favor of G. B. Montgomery, whose claim is hereto attached, for his legal services in the Prewitt case, and for such an amount as, under the circumstances of the case, the Legislature may regard as fair and proper. He was employed by the Attorney-General on the last trial of the Prewitt case, and has received from the State only the sum of \$300 for this service.

R. W. WATERMAN, Governor,
W. C. HENDRICKS, Secretary of State,
G. A. JOHNSON, Attorney-General,
State Board of Examiners.

The Claim of Captain John Mullan.

The State of California to John Mullan, Dr.

For a commission of 20 per cent on \$11,723 64, for collecting from the United States for, and on January 18, 1889, delivering to the Governor of the State of California, Treasury drafts for the sum of \$11,723 64 (said commission being a fee to be paid contingently and in the event of success only in collecting said \$11,723 64)—\$2,344 72. For interest on \$2,344 72 at rate of 7 per cent per annum from January 18, 1889, the date when said drafts for said \$11,723 64 were delivered by John Mullan to the Governor of California, calculated up to January 18, 1891, prior to which date the said principal of \$2,344 72 could not be duly appropriated and paid. Total, \$2,672 98.

This claim was approved by the majority of the Board of Examiners, who adopted and attached thereto the following statement of approval:

STATE OF CALIFORNIA,
OFFICE OF THE STATE BOARD OF EXAMINERS, }
SACRAMENTO, December 2, 1890.

The annexed claim, presented by John Mullan, for services in collecting from the United States moneys due the State of California, for \$2,672 98, is hereby allowed, for the following reasons:

That it would be a breach of good faith, after the action of the Governor and Legislature of California in employing Mullan as the agent of the State in the matters embraced in said claim and fixing his compensation, and after Mullan has done the service, to reject his claim for compensation based upon the agreement between him and said authority of the State. That this whole subject-matter was investigated at the last session of the Legislature by a special joint committee to which it was referred, and Assembly Joint Resolution No. 7, favorable to Mullan and based upon the favorable report of said committee, was unanimously adopted by the Assembly. (See Journal of the Assembly, twenty-eighth session, pp. 907-908.)

G. A. JOHNSON, Attorney-General.
W. C. HENDRICKS, Secretary of State.

To this approval the Chairman of the Board, Governor Waterman, dissented, and caused to be attached thereto the following statement:

STATE OF CALIFORNIA,
OFFICE OF THE STATE BOARD OF EXAMINERS, }
SACRAMENTO, December 8, 1890.

Acting under the authority and power granted me by Section 656 of the Political Code, as a member of the State Board of Examiners, I hereby dissent to the action of the majority of said Board in the approval of the claim of Captain John Mullan as special agent of the State of California for the collection of moneys due the State from the Government of the United States.

The said John Mullan claims a commission of 20 per cent on the sum of \$11,723 64, paid to the State by the United States, and interest on said commission from the date of pay-

ment up to January 18, 1891, by reason of several appointments given him by the Governor and Surveyor-General of this State to act as agent of the State in the collection of the moneys due from the General Government.

I do not believe that the Governor or Surveyor-General, in the absence of any law on the subject creating such an agent, had any right or authority to appoint such an agent to represent her interests in the halls of Congress to secure to her what rightfully and legally belongs to her, or to facilitate legislation in her behalf. The appointment of an officer, before the office is created, must, in the very nature of things, be void and of no effect, and the recognition of such an office would be establishing a most dangerous precedent. The State is now represented in Congress by two Senators and six Representatives, whose duty it is and whose pride it should be to look after every interest of California at Washington, and I do not believe there was any necessity for the appointment of a special agent to represent the State, and if there had been any extraordinary condition of affairs that would have rendered a special agent at Washington desirable, I hold that he could not have been appointed until the Legislature should create the office, and that neither the Chief Executive nor the Surveyor-General has the power to create offices or appoint officers at will.

I therefore refuse to approve the claim of Captain John Mullan, and dissent from the action of the majority of the Board.

R. W. WATERMAN,
Governor and Chairman of the State Board of Examiners.

The Claim of Dennis Jordan.

SAN FRANCISCO, August 10, 1890.

To the honorable State Board of Examiners:

GENTLEMEN: I have the honor to herewith present to your honorable Board the attached claim for work done at the Branch State Prison at Folsom, during the years 1878-9, amounting in the aggregate to \$79,000, devoid of interest, together with this statement regarding the same:

In 1878 I entered into a contract with the State Board of Prison Directors, then consisting of the Governor, the Lieutenant-Governor, and the Secretary of State, to erect the structure now known as the Folsom State Prison, for the sum of \$161,500. I commenced work in July, 1878, and up to June, 1879, when the contract was taken away from me, I had been paid the sum of \$32,033 24, as shown by the records of the Controller's office, on the contract, and \$5,000 on account of the "plant." During this time I had completed one half of the building; performed extra work at the order of the Architect, of the value of \$12,127 90; put in a plant at a cost of \$11,336, all of which is more fully shown by the attached bill, itemized statements, and reports.

Why the contract was taken away from me, how I was hampered by the Superintendent and Architect and prevented from completing the buildings, is more fully and specifically shown by the attached copy of "the testimony taken before the joint session of the Committees on Claims of the Senate and Assembly of the State of California, at the twenty-seventh session of the Legislature," and by the attached copy of the report of the "Committee on Claims, of the Assembly, of the twenty-eighth session of the Legislature," which I most respectfully ask your honorable Board to carefully read and consider.

During the time I had the contract I completed one half of the building, which, if paid for by one half of the contract price, would have cost \$80,750, and the cost of the "plant" and extra work \$23,463 90, making a total cost of \$104,213 90 for one half of the Folsom State Prison.

The building was completed after I ceased work; *id est*, the other half was constructed at the cost of over \$205,000. That is to say, the second half cost the State over twice as much as the first half, constructed by myself, without counting the cost of the "plant" and extra work, which was not an item of cost in the second half.

Owing to the well known enmity of persons who were interested in having the contract taken away from me in 1879, I did not present this matter to the State for payment until 1887, when the Legislature passed a bill providing for the payment of my claim. This bill was passed by the Senate by a vote of twenty-four for it to twelve against it; and, by the Assembly, by a vote of forty-one votes for it and twenty-nine against it. The bill was "pocketed" by Governor Bartlett—not because he considered it unjust, but, because he claimed the Legislature had no power to act in the matter until the claimant, myself, had complied with the provisions of Section 664 of the Political Code, which provides that "any person having a claim against the State, the settlement of which is not otherwise provided for by law, must present the same to the Board of Examiners at least four months before the meeting of the Legislature."

A bill was also passed by the last session of the Legislature providing for the payment of this claim, by a vote of sixty-one for it and only ten against it in the Assembly, and by a vote of twenty-nine for it and only eight against it in the Senate. Thus you will observe a large majority in both Houses of the Legislature, at two different sessions, after lengthy investigations into the merits of the claim, decided upon its justness, and that it should be paid.

The Act passed by the last Legislature was "pocketed" by Governor Waterman, for the same reason that was given by Governor Bartlett: that the Board of Examiners

should act upon it before the Legislature, and that it should be transmitted to the Legislature by the Board of Examiners.

Therefore, I herewith present to your honorable Board this claim and statement, calling your attention particularly to the testimony taken before the Joint Committee on Claims in 1887, and I most respectfully ask and petition your honorable Board to approve the same, and to transmit it to the next session of the Legislature with the statement of your approval.

The question of interest being added to this claim, or recommended by your Board, I leave entirely to your sense of right and justice, for when I entered into the contract to build the Folsom Prison I was one of the largest contractors in California, with a credit practically unlimited, while to-day I am poor and in debt, my business gone, and credit ruined—all caused by the machinations of political and other enemies, who conspired to take from me this contract, upon which all my fortune and credit were staked.

With this I most respectfully submit my claim.

D. JORDAN.

The Board approved this claim, and attached to it the following statement of approval:

STATE OF CALIFORNIA,
OFFICE OF THE STATE BOARD OF EXAMINERS, }
SACRAMENTO, December 27, 1890.

For the reasons above given, we hereby approve the above claim of D. Jordan, and herewith transmit it to the Senate and Assembly of the State of California, in the twenty-ninth session convened.

W. C. HENDRICKS,
Secretary of State.

I approve the same, without interest. } State Board of Examiners.
G. A. JOHNSON,
Attorney-General. }

THE STATE BOARD OF EXAMINERS.

The Board of Examiners, as now constituted, is not able to perform the duties imposed upon it by law. The system is wrong, and, in this regard, we quote in full from our last report:

"The business required of this Board has, during the past two years, been attended to as well as the circumstances would allow. The record shows an increase in accounts examined and audited of over fifty per cent over and above that of the preceding years, and we are conscious that much remains undone that should have been attended to. The different Boards, Commissions, asylums, prisons, and other institutions receiving support from the State are creatures of the State, and are a part of the State; yet, little by little, within the past years, they have gradually withdrawn themselves from any control the Executive may have before exercised over them. We do not believe that all interest and responsibility of the Chief Executive in the management of the different State institutions ceases upon the appointment of the Trustees, Directors, or officers; but we believe that the Governor should be informed, at times, of the condition of every department of State government, and that it was the intention of the framers of our Political Code that the Board of Examiners should exercise this supervisory care over all the different departments. This plan may have been effectual while the State was in its infancy, but the large growth in her population during the past fifteen years, and the increase of interests within the State, has led to the multiplication of Boards, Commissions, and Bureaus, and to the consequent increase of business coming before the Board of Examiners, so that now that Board is able to be of but little protection to the State or her interests, and she certainly should have some officer or officers who would attend to her business interests. The time of the present ex officio Board of Examiners is wholly consumed by the business coming before the several departments of the members, who can

only afford to devote a few minutes to the examination of claims, where hours should be expended.

"This department is the most important in the State government, and should not be neglected, and we advise the creation of a State Board of Examiners, whose sole duty it shall be to audit all claims against the State, and to inaugurate a thorough business system throughout all the departments of State government, and compel its introduction, and to personally investigate all expenditures of the State's money, for whatever purpose appropriated.

"Such a Board would fill the hiatus between the Legislature which appropriates and the institutions which spend the money. It would exercise such a control over the expenditures made by the institutions as to prevent extravagance and bring the cost of State government down to the minimum. It would be advisory and supervisory as far as expenditures were concerned, and would be of great benefit to the State and to her creditors, who, under the present system, are often compelled to wait months for money that should have been paid upon demand.

"If such a Board should be created by your honorable bodies, it should take the place of the present Board of Examiners. It should also be authorized to act as an advisory Board to all the departments of State government; and no extraordinary expenditure should be made unless it receives the sanction of the Board. It should approve all plans and contracts, and should exercise control over the different orphan asylums, homes of aged indigents, and county hospitals receiving State aid, and should be empowered to compel the introduction of such a business system as in their judgment may be best adapted to the wants of these institutions."

CONCLUSION.

Just before going to press with this report, and too late for this Board to take any action thereon, we were informed by the Controller that the appropriation for the "cost and expenses of the trials of persons charged with violating any of the provisions of any law for the preservation of fish for the forty-second fiscal year," has been exhausted, and there has been filed in this office claims amounting to the sum of \$148 30. We would suggest the advisability of making an appropriation of \$1,000 to meet the claims that will arise during the fiscal years chargeable to this appropriation.

We have also received from the Examining Commission on Rivers and Harbors a full and complete statement of all the expenses of said Commission, in the discharge of the duties imposed upon them by the Act creating said Commission: "An Act to provide for the appointment of an Examining Commission on Rivers and Harbors, defining their duties and powers, and prescribing their compensation," approved March 19, 1889, amounting to the sum of \$957 23. This indebtedness was incurred under the provisions of law and is a legal charge against the State. We recommend that an appropriation be made to pay the same.

We have also been informed by the Secretary of State that in repainting, frescoing, and refurnishing the Senate and Assembly Chambers, and the rooms of Sergeants-at-Arms of both Houses, he has exhausted the appropriation for "Repairs to the State Capitol and furniture for the forty-second fiscal year," and as the work is not yet complete, and there

will be more or less of repairs to be made around the State Capitol during the remainder of the forty-second fiscal year, there will probably be a deficiency of not less than \$1,500 in this appropriation. We therefore recommend that an appropriation of \$2,000 be made to meet these claims.

We append hereto the report of the Secretary of this Board regarding the investigations made by that official into the condition and management of the City and County Almshouse of San Francisco, and County Hospitals of San Diego and Los Angeles Counties.

Very respectfully,

R. W. WATERMAN, Governor.

W. C. HENDRICKS, Secretary of State.

G. A. JOHNSON, Attorney-General.

REPORT OF THE SECRETARY.

STATE OF CALIFORNIA,
OFFICE OF THE STATE BOARD OF EXAMINERS, }
SACRAMENTO, September 15, 1890.

To the honorable State Board of Examiners:

GENTLEMEN: Complying with an order from your honorable Chairman, Governor R. W. Waterman, I have made an official examination of the condition of the City and County Almshouse of San Francisco, as well as an expert examination into the books of that institution, and I herewith have the honor to submit to you my report thereon.

In making this examination I was especially charged to check the claim for support of aged indigents for the half year ending June 30, 1890, and for that purpose I took the said claim with me. I found in the main it was substantially correct, although a good many errors had occurred in it, as will be shown by the annexed statement.

The accountant had included in this claim \$441 94, which should have been omitted, and he neglected to include therein \$547 80, making a credit due the Almshouse on the last claim of \$105 86.

Under the new management there has been several important changes, most noticeable of which was the improvement in the plumbing and the removal of the closets from the main building to semi-detached buildings, thus relieving the main and ward buildings of much of the foul stench that has been noticeable there for many years past.

Stationary wash tubs have been placed in the laundry building, which makes the work of washing easier for the old women and keeps the building in better condition.

The wards were all very clean, indeed, and the food above the usual standard of such institutions. The clothing of the inmates was not of the best, and none too good, but I think sufficient to keep them warm at this season of the year. The meat and bread were of prime order, and as I was there during most of the meals for three days, I know that the inmates have all the food that they desire.

The total number of inmates received and cared for in this institution during the fiscal year ending June 1, 1890, is one thousand five hundred and twenty-three; the daily average number of inmates was seven hundred and fifty; the amount expended for their support and maintenance was \$7,715 58, making a net cost per inmate of \$101, or a daily cost of the institution of \$207 53; a daily cost per inmate of 27 $\frac{3}{4}$ cents.

If there can be any fault found with the management of this institution, as conducted at present, it is chargeable entirely to the inexperience of the present manager. The lamented death of the late Mr. Keating had thrown everything at the Almshouse in a state bordering upon chaos, and Mr. Weaver, the present Superintendent, was entirely unfamiliar with such work when he took charge, and many of the

propositions that came before him had to be worked out without any help from outside sources, and the result he has obtained is creditable to him and to his corps of assistants, which, by the way, is lamentably small. He has not at present, nor has he ever had since he has been there, more than half the number of assistants which should be provided him, the result of which is that some of the inmates must necessarily be neglected at times, and places him at a great disadvantage.

If any charge of mismanagement can be made against the institution it should be charged to the laches of the Board of Supervisors, and neglect to provide the Superintendent with the amount of assistants, rather than to the management of the institution. The Deputy Assistant is Mr. Castello, who for many years was deputy under Mr. Keating. The books are remarkably well kept, and show a painstaking labor seldom met with in institutions of this kind.

S. P. MASLIN,
Secretary.

LIST OF PERSONS

Erroneously included in the claim of the San Francisco City and County Almshouse, for Support by the State of Aged Persons in Indigent Circumstances, for the Half Year ending June 30, 1890.

NAME.	When Admitted.	When Discharged.	TIME.		Amount.
			Mos.	Days.	
Kate Crawley.....	September 26, 1888.	No record.....	6	-----	\$50 00
Mary Moore.....	May 26, 1889.....	No record.....	6	-----	50 00
Margaret Woolf.....	November 2, 1889.....	No record.....	6	-----	50 00
Mary A. McQuillan.....	February 26, 1890.....	No record.....	4	2	33 88
Catherine Duffy.....	January 16, 1890.....	No record.....	-----	14	3 85
Alex. Wittman.....	Entered twice.....	-----	6	-----	50 00
Charles Erickson.....	April 17, 1889.....	March 16, 1890.....	3	15	29 21
James McGoy.....	December 7, 1887.....	February 28, 1890.....	-----	-----	34 24
John Murphy.....	January 14, 1886.....	March 3, 1886.....	6	-----	50 00
Jesse M. Walcott.....	Entered twice.....	-----	6	-----	50 00
Alex. Spaid.....	June 8, 1889.....	60 years, December, 1890.....	4	27	40 76
Total amount of overcharge.....	-----	-----	-----	-----	\$441 94

LIST OF PERSONS

Erroneously omitted in the claim of the San Francisco City and County Almshouse, for the Support by the State of Aged Persons in Indigent Circumstances, for the Half Year ending June 30, 1890:

NAME.	When Admitted.	Age When Admitted.	TIME.		Amount.
			Months.	Days.	
Jean Blank	Dec. 20, 1884..	59 years.....	6	-----	\$50 00
John Prester.....	Dec. 25, 1878..	53 years.....	6	-----	50 00
John Kennedy.....	Jan. 22, 1875..	54 years.....	6	-----	50 00
James Connally.....	July 13, 1889..	60 years.....	6	-----	50 00
Fred. Oescher.....	July 18, 1876..	51 years.....	6	-----	50 00
Antonio Gihotte.....	Mar. 17, 1869..	40 years.....	6	-----	50 00
John Barry.....	Nov. 5, 1889..	65 years.....	6	-----	50 00
John Meinig.....	Feb. 22, 1886..	59 years.....	6	-----	50 00
Charles A. Martin*.....	Nov. 1, 1889..	76 years.....	-----	-----	47 80
Anne Griffin.....	Mar. 31, 1879..	50 years.....	6	-----	50 00
Mary Green.....	July 22, 1880..	51 years.....	6	-----	50 00
Total amount of addition.....	-----	-----	-----	-----	\$547 80
Less amount deducted.....	-----	-----	-----	-----	441 94
Amount due City and County Almshouse on last claim.....	-----	-----	-----	-----	\$105 86

* Charles A. Martin was entered as "discharged January 9, 1890," and eight days (\$2 20) was claimed for his support. He has never been discharged; and the sum of \$50 is due the county, less the amount paid, \$2 20.

REPORT ON POOR HOUSES OF SAN DIEGO AND LOS ANGELES COUNTIES.

STATE OF CALIFORNIA,
OFFICE OF THE STATE BOARD OF EXAMINERS, }
SACRAMENTO, September 1, 1890.

To the honorable State Board of Examiners:

GENTLEMEN: Complying with orders given me by the Chairman of your Board, Hon. R. W. Waterman, Governor of California, I have personally inspected the County Poor Houses and Farms of San Diego and Los Angeles Counties, and have the honor herewith to submit my report thereon:

SAN DIEGO COUNTY.

This hospital is located some three miles from San Diego City, in what is known as Mission Valley. The land belonging to the hospital consists of some two hundred acres, most of which is useless for anything except grazing. Forty acres are planted in grain and several acres in garden products.

The Almshouse or hospital consists of some half a dozen cottages, with more in contemplation. The cottages are one-story, and are of cheap structure, which, in this climate of almost perpetual summer, serves for the purpose of sheltering the inmates. I found the buildings in very good condition, with very little sickness among the inmates, who were well fed and comfortably clothed.

Like most county institutions in this State, the money received from the State is turned into the General Fund of the county, and the Board

of Supervisors has appropriated a certain amount each year for the maintenance of the institution, regardless of the amount received from the State.

LOS ANGELES COUNTY.

This county has two institutions which receive money from the State for the support of aged persons. One known as the Hospital, situated within the city limits, is an old building and very much in need of repairs. The cases sent here are usually those afflicted with some chronic trouble, and unable to perform any work whatever. The building, under the able management of a Superintendent, is divided into wards, so as to keep separate the different classes of inmates. I found considerable sickness in this building, but mostly of chronic nature. The inmates were well clothed and the food excellent.

The other institution is located near Downey City, about twenty miles from the city of Los Angeles. The farm comprises eighty acres, mostly planted to oranges. The building is a new one, just completed. It is built according to plans on the European style, namely: the main building being situated in the center and the wards radiating from it like spokes of a wheel, each ward being connected with the main building by covered passage-ways. The class of inmates cared for in this building are the old and infirm, and the pauper class who are able to do but a small amount of labor. It is one of the best county institutions that I have visited in this State. The care and attention given the inmates are perfect, the food plentiful and of good quality, and the clothing all that is required in this climate.

O

REPORT

OF THE

BOARD OF STATE CAPITOL COMMISSIONERS

TO THE

TWENTY-NINTH SESSION OF THE LEGISLATURE OF CALIFORNIA.

1891.

BOARD OF STATE CAPITOL COMMISSIONERS:

R. W. WATERMAN,	-	-	-	Governor.
W. C. HENDRICKS,	-	-	-	Secretary of State.
ADAM HEROLD,	-	-	-	State Treasurer.
W. W. DOUGLAS, Secretary.				



SACRAMENTO:

STATE OFFICE, : : : : : J. D. YOUNG, SUPT. STATE PRINTING.

1890.

EMPLOYÉS.

David Meldrum	Gardener.
William White	Laborer.
B. Caminetti	Laborer.
Thomas E. O'Halloran	Laborer.
A. Kunz	Laborer.
J. O'Brien	Laborer.
Cornelius Sullivan	Laborer.
Andrew S. Beattie	Laborer.
D. Black	Laborer.
John Conrad	Laborer.
Michael Lucy	Laborer.
G. H. Hamann	Laborer.
George Newman	Laborer.
Thomas Walsh	Policeman.
Edward Rogers	Policeman.
Charles E. Elsasser	Policeman.
J. E. P. Spillman	Watchman, State Printing Office.

REPORT.

To the Senate and Assembly of the State of California:

The Board of State Capitol Commissioners deeming it necessary, for your proper information, that a more extensive report be made of their proceedings than has heretofore been made by the Governors in their messages to the Legislature, have the honor to herewith submit their report for the past two years.

SECRETARY.

The duties of the Board of State Capitol Commissioners have always been such as to require the services of a Secretary, and no provision ever having been made for the appointment of one, this Board was instrumental in having passed at the last session of the Legislature an amendment to Section 386 of the Political Code, making the Executive Secretary of the Governor ex officio Secretary of the Board of State Capitol Commissioners, and fixing his salary.

EMPLOYÉS.

Provision was also made by the last Legislature for an increase in the number of laborers and policemen on the Capitol grounds, and the salary of the laborers was increased from \$75 to \$90 per month. The employés now appointed by the Board are one gardener, twelve laborers, three policemen, and one watchman of the State Printing Office.

IMPROVEMENT OF THE STATE CAPITOL GROUNDS.

The last Legislature authorized and directed this Board "to have all that part of the State Capitol grounds, in Sacramento, lying east of the old west line of Twelfth Street of said city, raised by filling with earth to the grade of the adjacent streets, with sufficient slope towards its sides to insure proper drainage; and to have the trees thereon reset as the filling progresses; to have laid out and graveled the necessary walks and driveways; to raise the water pipes now in place, and to add about two thousand three hundred and forty feet more of water pipes, with the necessary hydrants, etc.; to have the driveway east of the Capitol paved, and the old pavement of the driveways in front of and upon both sides of the Capitol repaired; to have such seats and drinking fountains erected in different parts of the Capitol grounds as in their judgment may seem best; and to provide for a proper placarding, with their popular and botanical names, of the trees and shrubbery in said grounds," and for these purposes appropriated the sum of \$40,250.

In accordance with the authorization of the Legislature, the Board selected and employed Mr. C. E. Grunsky, of Sacramento, as Engineer, to make the necessary plans and surveys required in filling in the grounds; to draw up plans and specifications for the pavement of the driveway east of the Capitol, and to take charge of and generally superintend the entire work of filling and the construction of the pavement.

The Board then authorized the Secretary to advertise for bids for filling in the grounds and for paving the driveway in accordance with the plans and specifications drawn by the engineer in charge. The law relative to advertising was complied with in all particulars, and the contracts properly awarded to the lowest bidders.

M. M. De Sacramento was given the contract for filling in the grounds at 42 $\frac{4}{6}$ cents per cubic yard, and to the Santa Cruz Rock Pavement Company of San Francisco, was given the contract for paving the driveway at 24 cents per square foot.

The material used in filling in the grounds is a loamy soil, equal in quality to that in use in Sacramento for filling in garden plots.

The driveway east of the Capitol consists of a four-inch concrete foundation, composed of one part of best Portland cement to seven parts of sand and gravel, on top of which is laid one and one half inches of bituminous rock specially prepared, and all well tamped and rolled, presenting a smooth level surface, and securing a durable and noiseless roadway.

The curbing is of granite, cut to correspond with the curbing along the walks on the outside of the grounds, and adds greatly to the appearance of the driveway. At each turn of the driveway in front of, in the rear, and at each end of the Capitol have been placed heavy granite posts to prevent vehicles from encroaching upon the lawn.

The granite used in the curbing and posts was shipped from the State Prison at Folsom, and cut by workmen on the Capitol grounds.

The old concrete pavement on the L and N Street approaches to the Capitol being in need of extensive repairs, the Board decided, in order to have it correspond to the new pavement, and at the same time it being cheapest and most satisfactory, to have it prepared as a foundation and to lay thereupon a layer of bituminous rock one and one half inches in thickness. This was done at an expense of 17 cents per square foot. The recess between the Assembly wing and the rotunda was paved with granite blocks four inches in width by seven to ten inches in length and eight inches in depth, laid in sand and securely tamped. This kind of pavement was considered necessary by the Board, as many horses are hitched in this recess and their constant stamping in one spot would soon destroy a bituminous pavement.

Just here a portion of the report of the engineer in charge made to the Board upon the completion of the work on the grounds and pavement will not be uninteresting, and will explain many of the details of the work which otherwise might be overlooked in this report:

The grounds have been raised by filling from the west line of Twelfth Street to Fifteenth Street. The aggregate amount of earth hauled in from June seventeenth, when work commenced, to October 10, 1889, when it was completed and accepted, was fifty-two thousand one hundred and twenty-four and one one hundredths cubic yards.

The driveway east of the Capitol was paved with bituminous rock on a concrete foundation, and the old concrete work on the approaches to the Capitol from L and N Streets was covered with bituminous rock. Some repairing has also been done on the pavement in front of the Capitol. New connections from the driveway in the rear of the Capitol with the drains were made, and the position of many of the hydrants in the grounds was changed to suit the new arrangement of walks and driveways, and all hydrants were raised to the new grade.

I have planned all walks and driveways in the grounds with a view to the establishment of graceful lines, of adaptation to the older portion of the grounds, and of convenience to the public.

It is a well recognized fact that a passage for vehicles must be opened through the grounds at about Twelfth Street, in order that the heavy traffic on Eleventh Street past the Capitol may be turned that way. This requirement has been met by providing for the opening of Twelfth Street, and by arranging a second driveway through the grounds

in a very direct line at Thirteenth Street. From both of these communication to an M Street entrance from Fifteenth Street has been established. These driveways should be thrown open to the public as soon as possible.

The walks as planned by me, and which have been well marked by stakes set for the convenience of your gardener, appear on the plat of the grounds which I have prepared for your use. They open easy and sufficiently direct communication from and to various entrances and buildings. A central space between Twelfth and Thirteenth Streets has been raised two feet above the ground height of the park, and will become a handsome feature when converted into lawn and flower beds.* It can, at some subsequent time, be made the site for a conservatory or other ornamental structure.

Water is supplied to the grounds between Twelfth and Thirteenth Streets by means of a pipe-line along Thirteenth Street, which taps a six-inch main in the alley between N and O Streets. From this supply pipe two branches extend parallel to and near the center line of the park, one toward the west, the other toward the east.

Two pipe-lines branch off from the east of these at right angles, to the north and south, and each of the pipe-lines supplies water to two hydrants, except in the case of that portion of the park where the Pavilion now stands. This system of water supply is inadequate to meet the ultimate requirements of the portion of the park in question, and provision must soon be made to connect a new system of pipes in the grounds with the sixteen-inch city water main in Sixteenth Street. It would be well to connect with the city main by means of a six-inch pipe along M Street, terminating in a four-inch header at a point just west of the Pavilion. The header should extend from near L Street to near N Street, and should supply water to four lines of two-inch pipe running parallel through the park towards the west.

It does not seem advisable to connect more pipe-lines with the present supply pipe, as has been suggested, for the reason that the chief defect of the present system lies in the insufficiency of the city main now connected with, and of the main supply pipes along Thirteenth Street to the park. The driveways and walks, as soon as they have become sufficiently compact to permit of hauling heavy loads along them, should be graveled with the cleanest gravel obtainable at a reasonable cost. About one thousand eight hundred loads of gravel will be required for driveways, and five hundred loads for the walks.

The Board regrets that the suggestions of the engineer in charge relative to the purchase and laying of necessary pipe-lines, and the graveling of drives and walks, and as contemplated by the Legislature in its Act, could not be carried out because of the appropriation becoming exhausted. For the same cause no new seats nor drinking fountains have been erected, and the trees and shrubbery have not been placarded.

By order of State Treasurer Herold, Wm. Gutenberg, a foundryman of this city, delivered on the Capitol grounds four thousand nine hundred and seventy-six feet ten inches of five and six-inch iron pipe, at a cost of \$1,915 03, presumably for the purpose suggested in the Engineer's report. At the time the order was given the appropriation was all but exhausted, and, as a result, the pipe has never been placed in position, and still lies where it was delivered. Mr. Gutenberg was paid the amount left in the appropriation, which leaves a balance of \$1,482 83 still due him.

The major portion of the newly made ground has been covered with handsome lawns, and already presents an attractive appearance. A number of the old trees have been raised or reset, and many new trees and shrubs have been planted.

CONSTRUCTION OF GRANITE STEPS.

The Act passed by the last Legislature authorized and directed the Board of State Capitol Commissioners "to have the ten tiers of wooden steps now in the walks on the State Capitol grounds in Sacramento removed, and in their stead have constructed cut granite steps, buttresses, and posts, the foundations therefor to be constructed of brick and concrete. Said work to be done by day labor and according to plans and specifications furnished by said Capitol Commissioners, the rise of said steps to be not less than eight cut work, and the tread not less than six cut

work; *provided*, that said granite be obtained from the Folsom State Prison."

The same Act authorized the Board of State Prison Directors to furnish the said granite to the Capitol Commissioners, and appropriated the sum of \$17,920 to carry out the provisions of the Act.

Mr. Grunsky was selected to prepare plans and specifications for the steps, which were adopted by the Board, and J. Carroll, Jr., of Sacramento, a practical stonemason, was engaged to superintend the cutting of the stone and generally supervise the work. It was soon learned that the estimates upon which the appropriation was made were far from correct, and that the steps could not be completed within the specified amount. The Commissioners were handicapped from the start by the provisions of the bill requiring the work to be done by day labor, and much time was lost and many expenses necessarily incurred which could have been saved could the work have been done by contract.

The expense of getting the granite from Folsom was far more than was estimated, and the plans adopted by the Board were for molded instead of square-cut steps, thus increasing the cost of cutting almost one half.

But four tiers of steps in front of the Capitol have been completed. The stone for the remaining two tiers in front is all cut, but the steps could not be set owing to the appropriation being exhausted. Much of the stone for the four tiers in the rear of the Capitol is cut, and all the granite is on the ground.

The bill of the Folsom State Prison for granite furnished, amounting to \$1,858 60, remains due and unpaid, and will be presented as a deficiency bill. Also, a balance of \$79 48, due John D. Shearer for repairing the artificial stone pavements, remains unpaid and will be presented as a deficiency bill.

GRADING AND GRAVELING FIFTEENTH STREET.

The sum of \$2,000 was appropriated by the last Legislature "for the purpose of grading and graveling the west side of Fifteenth Street, between L and N Streets, immediately adjoining the State Capitol grounds on the east," and this Board was given full authority in the matter. The street has been graded and graveled in accordance with the ordinances of and grades established by the Board of Trustees of the city of Sacramento, to the entire satisfaction of said Board, and under the direction of the Street Commissioner of the city of Sacramento. The amount expended for such purpose was \$852 09, and the remainder of the appropriation has been turned back into the General Fund of the State Treasury, according to the provisions of the Act of the Legislature.

WALKS IN THE STATE CAPITOL GROUNDS.

An appropriation of \$3,200 was made by the last Legislature for the purpose of constructing two walks in the State Capitol grounds, "one to begin from N Street, opposite Twelfth Street, and continue obliquely to the Capitol driveway, and the other to begin on L Street, opposite Twelfth Street, and continue obliquely to the Capitol driveway opposite the north and south ends of the Capitol."

Owing to the fact that the granite steps have not been erected in the

rear of the Capitol, it was deemed by the Board unadvisable to begin the construction of the walks provided for. In consequence this appropriation remains intact, to be used whenever the steps are placed in position, and the walks may be completed without interference or delay.

CONCLUSION.

The Board respectfully and earnestly recommends that sufficient money be appropriated by your honorable bodies to complete the construction of the granite steps, and for the purchase of pipe and laying of the same in the newly filled portion of the Capitol Park, as suggested in the report of the Engineer, and also the payment of all deficiency bills presented against the appropriations under our control and heretofore noted in this report.

We would also recommend that the biennial appropriation for "water for irrigation, purchase of hose and implements, to be used on the State Capitol grounds," be increased from \$5,000 to \$8,000, and that it be for "the uses of the Board of State Capitol Commissioners on the Capitol grounds." Our reasons for asking for this increased appropriation are that the area covered by lawns and flower beds has been more than doubled, the water rate has been doubled, and the expenses incurred in the repair and purchase of hose, implements, etc., have been greatly increased.

We desire particularly to call your attention to the excellent condition in which the grounds are kept, and in this connection to note our appreciation of the efforts of the Gardener, Mr. D. Meldrum, to whom great credit is due.

R. W. WATERMAN, Governor,
W. C. HENDRICKS, Secretary of State,
ADAM HEROLD, Treasurer,
Board of State Capitol Commissioners.

SACRAMENTO, December 13, 1890.

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REPORT

OF THE

SUPERINTENDENT OF STATE PRINTING

FOR THE

Fortieth and Forty-first Fiscal Years,

FROM

JULY 1, 1888, TO JUNE 30, 1890.



SACRAMENTO:

STATE OFFICE, : : : : : J. D. YOUNG, SUPT. STATE PRINTING.

1890.

REPORT.

STATE PRINTING DEPARTMENT,
SACRAMENTO, July 15, 1890. }

To his Excellency R. W. WATERMAN, Governor of California:

SIR: In accordance with law, I have the honor of submitting to you a report of the transactions of the Department of State Printing for the fortieth and forty-first fiscal years.

FORTIETH FISCAL YEAR.

The Legislature of 1889 appropriated \$70,000 to supply the deficiency in the appropriation for the support of the State Printing Office for the fortieth fiscal year, there having been but \$61,169 68 remaining from the appropriation made by the Legislature of 1887. Of this amount of \$131,830 32, the sum of \$131,559 63 was expended during the fortieth fiscal year, leaving a balance in the appropriation of \$270 69 on July 1, 1889. Table A, annexed, shows the manner in which the money was disbursed:

TABLE A.

Expenditures from July 1, 1888, to June 30, 1889.

Composition employés	\$60,065 20	
Bindery employés	17,056 05	
Press-room employés	10,528 25	
Miscellaneous employés	4,682 90	
Monthly employés	2,680 00	
Electrotype employés	72 00	
		<hr/>
Paper		\$95,084 40
Envelopes		20,296 62
Lithographing, engraving, and printing		1,118 02
Bindery supplies		2,533 25
Ink		2,687 44
Coal		2,421 00
Permanent material		1,858 50
Gas		1,505 30
Groceries, drugs, dry goods		637 80
Hardware		754 26
Repairs and plumbing		594 74
Indexing Statutes		379 84
Horse feed, shoeing, repairs to wagon and harness		400 00
J. D. Young (expense and petty accounts)		231 35
Water		287 52
Expressage, rags, washing, drayage		180 00
Advertising		165 60
Ice		85 00
Telephone		55 10
Miscellaneous		50 00
		<hr/>
Total		233 89
		<hr/>
		\$131,559 63

Table B shows the estimated cost of the service performed for the various State officers, Commissions, etc.:

TABLE B.

Showing the Amount of Work done for the Different State Departments for the Year ending June 30, 1889.

Senate, twenty-eighth session	\$20,173 50
Assembly, twenty-eighth session	16,383 91
Senate Journal, twenty-eighth session	2,107 00
Assembly Journal, twenty-eighth session	2,066 00
Statutes	3,912 00
Adjutant-General	2,802 75
Attorney-General	798 05
Bank Commisisoners	3,597 95
Bureau Labor Statistics	3,487 75
Chronic Insane Asylum	482 40
Capitol Commissioners	17 25
Clerk Supreme Court	2,520 75
Commissioner of Immigration	23 55
Controller	2,472 50
Deaf, Dumb, and Blind Asylum	250 90
Dental Examiners	140 00
Executive Office	1,176 70
Fish Commissioners	165 90
Harbor Commissioners	148 30
Home for Adult Blind	338 00
Home for Feeble-Minded Children	744 35
Insurance Commissioner	1,028 95
Insane Asylum, Napa	604 50
Insane Asylum, Stockton	539 45
Insane Asylum, Agnews	257 75
Normal School, San José	691 35
Normal School, Los Angeles	563 00
Normal School, Chico	65 55
Pilot Commissioners	17 50
Preston School of Industry	63 50
Railroad Commissioners	2,140 50
Secretary of State	5,639 35
State Agricultural Society	6,797 00
State Board of Equalization	813 90
State Board of Examiners	774 60
State Board of Forestry	1,699 05
State Board of Health	1,988 73
State Board of Horticulture	2,755 50
State Board of Prison Directors	686 70
State Board of Silk Culture	308 10
State Engineer	109 50
State Librarian	2,380 25
State Mineralogist	10,002 15
State Prison, San Quentin	2,896 65
State Prison, Folsom	1,415 00
State Treasurer	815 00
Superintendent Public Instruction	7,202 80
Superintendent State Printing	301 25
Surveyor-General	927 90
Trustees Mineral Cabinet	242 75
University of California	7,372 30
Viticultural Commissioners	3,039 75
Yosemite Valley Commissioners	298 10
<hr/>	
Money expended	\$126,247 89
Less excess of stock on hand	\$3,806 44
Less permanent material purchased	1,505 30
<hr/>	
	5,311 74
<hr/>	
	\$126,247 89

Table C is a statement of the stock on hand July 1, 1888, the amount purchased and consumed during the fortieth fiscal year, and the amount on hand June 30, 1889:

TABLE C.

Showing Amount and Value of Stock on Hand, July 1, 1888, Amount Purchased and Consumed, and Amount on Hand June 30, 1889.

KIND AND QUALITY OF PAPER.	ON HAND JULY 1, 1888.			AMOUNT PURCHASED.			AMOUNT CONSUMED.			ON HAND JUNE 30, 1889.		
	Weight—lbs.	Reams.	Sheets.	Value.	Reams.	Sheets.	Value.	Reams.	Sheets.	Value.	Reams.	Sheets.
Book	65	37	100	\$266 90	40	---	\$183 68	5	100	\$69 30	32	---
Book	56	18	---	89 64	755	240	3,206 65	58	---	273 32	---	---
Book	48	60	---	232 56	3,260	---	10,576 01	815	240	3,439 21	---	---
Book	44	---	---	---	6	---	38 25	2,654	---	8,616 61	606	---
Book	45	5	160	16 80	---	---	---	6	---	38 25	---	---
News	56	---	---	---	50	---	208 00	1	160	4 20	4	---
Lithographic Plate	40	21	---	126 00	---	---	---	50	---	208 00	---	---
Brief	70	3	100	78 88	---	---	---	21	---	126 00	---	---
Imperial	72	---	---	---	5	---	76 00	3	100	78 88	---	---
Standard Ledger	80	---	---	---	10	---	151 20	4	---	60 80	1	---
Super Royal	54	11	200	180 80	10	---	---	13	200	207 72	8	---
Royal	44	6	100	78 88	10	---	83 60	10	100	85 93	6	---
Medium	40	8	---	69 57	50	---	349 60	18	---	145 57	40	---
Medium	36	9	200	50 96	---	---	---	9	200	50 96	---	---
Folio Post	24	13	200	46 36	146	---	416 10	75	200	231 06	84	---
Folio Post	22	61	---	161 67	193	---	580 31	147	---	438 47	97	---
Folio Post	18	---	---	---	87	336	187 51	23	336	50 76	64	---
Folio Post, all linen.	14	20	200	117 36	40	---	216 00	47	200	263 16	13	---
Folio Post, all linen.	---	8	240	45 90	---	---	---	8	240	45 90	---	---
Folio Post, Japanese linen.	---	---	---	---	---	---	---	---	---	---	---	---
French Copying	28	5	300	22 66	36	3,000	28 50	35	3,000	28 50	1	---
Demy	24	38	---	131 78	50	456	82 13	14	300	79 74	41	456
Demy	40	20	---	115 60	108	---	169 42	14	300	52 59	76	240
Double Cap	36	2	10	10 40	21	216	308 05	69	240	221 80	41	---
Double Cap	32	10	---	46 20	167	48	101 80	19	216	113 00	22	---
Double Foolscap, 16x26	24	---	---	---	34	---	714 40	12	216	66 05	156	312
Double Foolscap, 16x25	24	---	---	---	54	---	129 20	10	---	46 20	34	---
Double Foolscap	24	43	---	149 11	46	360	181 44	38	360	124 68	16	---
Flat Cap	18	20	100	57 80	56	96	117 69	47	100	109 12	20	---
Flat Cap	16	35	150	81 62	219	216	417 15	148	102	296 32	106	264
Flat Letter	12	65	---	112 71	206	240	294 27	141	---	221 02	130	240

Flat Letter	10	33	2,000	46 53	160 00	162	192	192 84	107	130 40	88	192	108 97
Bond Paper, 24x38										120 00		500	40 00
Bond Paper, 22x28							1,300	40 30	1,500	40 30			
Bond Paper, 17x22							2,000	38 90	1,800	19 50		1,000	19 40
Bond Paper, 14x17			17,000	260 00			2,000	21 80	11,000	194 60		8,000	87 20
Cover Paper	80	6	240	34 85					4	23 13	2		11 72
Cover Paper	50	9		38 70		70		296 00	78	330 70	1		4 30
Cover Paper	35	5		15 12		130		378 50	74	216 67	61		176 95
Glazed Medium, spot and wove													
Tissue (extra)		5		7 86		10	240	46 05	1	6 63	9		39 42
Manilla Tissue		15		14 59		20		20 00	1	1 57	4		6 29
Manilla Wrapping Paper	150					3		42 00	3	31 59	3		3 00
Manilla Wrapping Paper	120					1		9 60	1	42 00			
Manilla Wrapping Paper	100					10		85 00	10	85 00			
Manilla Wrapping Paper	65					11		60 05	11	60 05			
Manilla Wrapping Paper	60	4		21 60					4	21 60		300	
Bristol Board							400	15 30		3 80			11 50
Railroad Board							250	16 25		16 25			
Shipping Tags			3,000	2 25						2 25			
Miscellaneous stationery								133 45		133 45			
				\$2,949 39				\$20,296 62		\$17,446 41			\$5,799 62

TABLE C—Continued.

ENVELOPES.	ON HAND JULY 1, 1888.		AMOUNT PURCHASED.		AMOUNT CONSUMED.		ON HAND JUNE 30, 1889.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.
No. 5 (Chelmsford).....			4,500	\$12 10	4,500	\$12 10		
No. 5 (Manilla).....			3,000	3 75	3,000	3 75		
No. 5.....	21,500	\$36 75			5,000	16 13	16,500	\$20 62
No. 5½.....	5,000	8 85					5,000	8 85
No. 6.....	26,500	51 94	179,000	321 92	151,000	277 47	54,000	96 39
No. 6 (Bank).....	8,000	26 40			1,000	3 30	7,000	23 10
No. 6½ (Manilla).....			5,000	7 50	5,000	7 50		
No. 7.....			55,000	128 75	15,000	39 25	40,000	89 50
No. 9.....	8,250	25 98	35,000	109 00	26,250	82 28	17,000	52 70
No. 10.....	4,500	15 75	45,000	158 64	46,500	163 65	3,000	10 74
No. 11.....	1,750	7 35	17,000	70 90	9,750	40 90	9,000	37 35
No. 12.....	3,500	15 75	10,000	45 30	1,500	6 69	12,000	54 36
No. 14.....	2,500	12 25	5,250	27 09	1,250	5 80	6,500	33 54
Special to order.....			31,600	233 07	28,100	206 83	3,500	26 24
Totals.....		\$201 02		\$1,118 02		\$865 65		\$433 39

Statement of Bindery Supplies, State Printing.

Amount on hand July 1, 1888.....	\$1,585 59
Amount purchased.....	2,687 44
Amount consumed.....	1,983 60
Amount on hand June 30, 1889.....	2,289 43

FORTY-FIRST FISCAL YEAR.

There was appropriated by the Legislature of 1889 the sum of \$200,000 for the support of the State Printing Office for the two fiscal years ensuing. Of this amount \$116,377 42 was expended during the fiscal year ending June 30, 1889, as shown by Table A, annexed:

TABLE A.

Expenditures from July 1, 1889, to June 30, 1890.

Monthly employes.....	\$3,390 00
Bindery employes.....	20,692 25
Composition employes.....	38,048 75
Press-room employes.....	8,586 05
Miscellaneous employes.....	5,173 65
Electrotype employes.....	144 00
	\$76,034 70
Paper.....	15,677 88
Envelopes.....	872 39
Lithographing and printing.....	1,404 30
Bindery supplies.....	5,685 00
Permanent material.....	6,696 04
Coal.....	1,530 00
Gas.....	257 40
Groceries, drugs, etc.....	772 31
Hardware.....	621 36
Repairs and plumbing.....	1,348 24
Horse feed, shoeing, repairs to wagon and harness.....	208 10
J. D. Young (expense and petty accounts).....	238 35
Water.....	360 00
Advertising.....	501 56
Ice.....	75 50
Telephone.....	52 50
Insurance.....	1,586 66
Lumber.....	635 67
Miscellaneous.....	861 80
Freight and drayage.....	814 31
Expressage, rags, washing.....	143 35
Total.....	\$116,377 42

Table B shows the estimated cost of the service performed for the various State officers, Commissions, etc.

TABLE B.

Showing the Amount of Work done for the different State Departments for the Year ending June 30, 1890.

Adjutant-General	\$8,249 20
Attorney-General	1,432 75
Bank Commissioners	4,855 15
Board of Equalization	106 50
Board of Examiners	328 50
Board of Health	918 50
Board of Horticulture	8,481 00
Board of Viticulture	93 75
Board of Agriculture	13,883 75
Board of Forestry	220 45
Board of Dental Examiners	126 50
Capitol Commissioners	4 00
Commissioners of Irrigation	11 50
Commissioners for Golden Gate Park	35 25
Governor	854 85
Fish Commissioners	207 40
Home for Adult Blind	369 95
Home for Feeble-Minded Children	1,470 15
Insurance Commissioner	1,178 50
Insane Asylum, Napa	204 95
Insane Asylum, Stockton	316 95
Insane Asylum, Agnews	419 00
Institution for Deaf, Dumb, and Blind	50 00
Pilot Commissioners	31 75
Railroad Commissioners	1,914 50
Secretary of State	2,304 15
State Controller	926 75
State Treasurer	473 00
State Librarian	10,729 55
State Engineer	72 35
State Mineralogist	5,440 00
State Normal School, San José	2,838 30
State Normal School, Los Angeles	221 00
State Normal School, Chico	499 00
State Board of Prison Directors	1,471 00
State Prison, San Quentin	5,825 00
State Prison, Folsom	1,203 25
Surveyor-General	365 00
Superintendent Public Instruction	10,133 95
Superintendent State Printing	156 25
Clerk Supreme Court	2,154 50
Preston School of Industry	3 50
Trustees State Mineral Cabinet	17 00
University of California	12,459 25
Whittier Reform School	94 50
Yosemite Valley and Big Tree Commissioners	47 50
	<hr/>
	\$103,199 60
Money expended	\$116,376 42
Less excess of stock on hand	\$6,481 78
Less permanent material	6,696 04
	<hr/>
	13,177 82
	<hr/>
	\$103,199 60

Table C is a statement of the stock on hand July 1, 1889, the amount purchased and consumed during the forty-first fiscal year, and the amount on hand June 30, 1890:

TABLE C.

Showing Amount and Value of Stock on Hand July 1, 1889, Amount Purchased and Consumed, and Amount on Hand June 30, 1890.

KIND AND QUALITY OF PAPER.	ON HAND JULY 1, 1889.			AMOUNT PURCHASED.			AMOUNT CONSUMED.			ON HAND JUNE 30, 1890.		
	Reams.	Sheets.	Value.	Reams.	Sheets.	Value.	Reams.	Sheets.	Value.	Reams.	Sheets.	Value.
Weight — lbs.												
Book.....	65	32	\$197 60	102	---	\$563 55	12	---	\$87 10	122	---	\$674 05
Book.....	56	---	---	174	---	887 04	85	240	397 04	87	240	490 00
Book.....	44	606	1,959 40	2,628	---	8,464 24	2,325	---	6,601 95	909	---	3,821 69
News.....	70	---	---	2	---	8 40	2	---	8 40	---	---	---
News.....	60	---	---	10	---	31 50	---	---	---	10	---	31 50
News.....	56	4	12 60	16	---	47 04	8	---	24 36	12	---	35 28
Standard Ledger.....	80	1	15 20	---	---	---	1	---	15 20	---	---	---
Imperial.....	72	---	---	10	---	140 00	---	330	9 50	9	150	130 50
Super Royal.....	54	8	124 28	10	---	105 00	8	330	131 48	9	150	97 80
Super Royal.....	40	---	---	21	---	163 80	21	---	163 80	---	---	---
Royal.....	44	6	76 56	10	---	85 50	4	---	59 46	---	---	---
Double Medium.....	80	---	---	12	---	187 20	---	---	---	12	---	102 60
Medium.....	40	40	273 60	---	---	---	---	---	---	40	---	187 20
Medium.....	36	---	---	10	---	68 40	---	---	---	10	---	273 60
Folio Post.....	24	84	231 40	110	---	382 80	115	---	339 28	79	---	274 92
Folio Post.....	22	97	283 51	154	---	491 26	186	---	537 42	65	---	207 35
Folio Post.....	18	64	136 75	100	---	261 00	29	---	45 40	135	---	352 35
Deny.....	28	41	456	10	---	40 60	10	---	40 60	41	---	139 49
Deny.....	24	76	218 03	25	---	87 00	59	240	134 51	49	---	170 52
Deny.....	20	---	---	25	---	72 50	---	---	---	25	---	72 50
Medium (Weston).....	40	---	---	5	---	56 00	5	---	56 00	---	---	---
Medium (Brown).....	40	---	---	19	---	148 20	19	---	148 20	---	---	---
Medium (Weston).....	36	---	---	5	---	50 40	5	---	50 40	---	---	---
Double Cap.....	40	22	104 50	10	---	58 00	---	---	---	32	---	162 50
Double Cap.....	36	156	659 75	20	---	104 40	151	212	632 15	25	100	132 00
Double Foolscap.....	32	34	129 20	---	---	---	21	---	79 80	13	---	49 40
Double Foolscap.....	24	---	---	80	---	278 40	80	---	278 40	---	---	---
Foolscap.....	28	---	---	94	---	398 72	94	---	398 72	---	---	---
Foolscap, 16x26.....	24	16	56 75	72	---	258 24	14	240	51 40	73	240	264 60
Foolscap, 16x25.....	19	41	116 85	---	---	---	41	---	116 85	---	---	---
Flat Cap.....	20	20	57 80	---	---	---	10	---	28 90	10	---	28 90
Flat Cap.....	18	31	66 59	20	---	52 20	21	336	41 79	29	240	77 00
Flat Cap.....	16	106	264	50	---	116 00	129	24	254 65	27	240	33 80
Flat Letter.....	12	130	185 96	50	---	87 00	80	240	98 96	100	---	174 00
Flat Letter.....	10	88	108 97	100	---	145 00	152	192	201 77	36	---	52 20

Linen Folio (Crane's).....	18	70 20	59	220	284 28	60	220	200 28	12	64 20
Linen Folio (Japanese).....	18	---	20	---	113 70	13	---	70 74	7	43 04
Linen Folio (Brunswick).....	18	---	10	---	30 00	---	240	1 50	9	28 50
Bond Paper, 24x35.....	---	40 00	---	5,070	344 76	---	500	40 00	---	344 76
Bond Paper, 17x25.....	---	19 40	---	5,000	97 00	---	2,700	52 80	---	64 02
Bond Paper, 19x24.....	---	---	---	5,000	135 00	---	---	---	---	135 00
Bond Paper, 14x17.....	---	87 20	---	5,000	56 25	---	---	---	---	143 45
Cover Paper.....	80	11 72	5	---	40 00	4	380	34 22	2	17 50
Cover Paper (Harper).....	80	---	2	---	16 00	---	240	4 00	1	12 00
Cover Paper.....	50	4 80	20	---	85 00	---	---	171 15	21	80 30
Cover Paper.....	35	176 95	20	---	58 00	59	---	3 00	22	63 80
Glazed Paper.....	9	39 42	2	---	10 00	10	---	45 00	8	35 04
Manilla Tissue.....	3	3 00	40	---	40 00	43	---	20 00	---	---
Italian Bill Paper.....	---	---	8	---	20 00	8	---	31 39	---	---
French Copying.....	1	2 39	11	---	29 00	12	---	72 00	---	---
Ajux.....	---	---	5	---	72 00	6	---	78 00	8	38 40
Manilla.....	60	---	25	---	117 00	17	---	83 25	---	80 00
Miscellaneous.....	---	---	---	---	163 25	---	---	---	---	60 47
Card Boards.....	---	11 50	---	4,450	127 25	---	2,670	68 28	---	---
Totals.....	---	\$5,793 33	---	---	\$15,677 88	---	---	\$12,097 70	---	\$9,363 63

TABLE C—Continued.

ENVELOPES.	ON HAND JULY 1, 1889.		AMOUNT PURCHASED.		AMOUNT CONSUMED.		ON HAND JUNE 30, 1890.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.
No. 5.....	16,500	\$20 62	-----	-----	16,500	\$20 62	-----	-----
No. 5½.....	5,000	8 85	-----	-----	2,000	3 54	3,000	\$5 31
No. 6 (Bank).....	7,000	23 10	-----	-----	-----	-----	7,000	23 10
No. 6.....	54,500	96 39	300,500	\$547 19	131,750	219 41	223,250	424 17
No. 7.....	40,000	89 50	36,000	91 08	52,000	119 86	24,000	60 72
No. 9.....	17,000	52 70	36,000	113 76	40,500	126 96	12,500	39 50
No. 10.....	3,000	10 74	15,000	53 70	14,000	49 12	4,000	15 32
No. 11.....	9,000	37 35	6,000	25 50	6,000	24 60	9,000	38 25
No. 12.....	12,000	54 36	6,000	27 66	6,500	29 01	11,500	53 01
No. 14.....	6,500	33 54	-----	-----	3,500	19 56	3,000	13 98
Special to order.....	3,500	26 24	2,000	13 50	200	1 49	5,300	38 25
Totals	-----	\$453 39	-----	\$872 39	-----	\$614 17	-----	\$711 61

Statement of Bindery Supplies—State Printing.

Amount on hand July 1, 1889.....	\$2,289 43
Amount purchased.....	5,685 00
Amount consumed.....	3,021 74
Amount on hand June 30, 1890.....	4,952 69

INCREASE OF STATE PRINTING.

Each successive year shows a great increase in the amount of State printing, consequent to some extent upon the additional public institutions inaugurated, upon the growth of the State, which enlarges the sphere of usefulness of all the departments, and, I am sorry to say, upon the recklessness of some of the officials in ordering work performed at this office. I have endeavored to check this latter cause of expense, but have not succeeded as well as I could wish. The Legislature should enact a law covering the matter.

During this year we have done a great deal of expensive printing which will not be apt to burden the department again for some years, such as the State Library Catalogue, State University Library Catalogue, Roster of California Volunteers, Record of the San Quentin Prisoners, History of the Normal School at San José, etc. We have, also, done a great amount of binding for the State Library and other departments, including Supreme Court Records.

FACILITIES OF THE OFFICE.

The facilities of the office have been increased by the purchase of another Hoe stop-cylinder press, two sizes larger than the others in use in the press-room, and which can be utilized in assisting the school book presses or doing any other work. We have also procured one of the small Colt presses, which assists in the lighter duties. Both of the new presses have worked admirably, the other machinery is in fine condition, and the press-room is capable of performing promptly and satisfactorily any work that may be demanded of it.

The book and job-rooms are being supplied with new type throughout, and in such liberal quantity that it will be several years before anything of consequence will be needed. The contract for this type was let to

Palmer & Rey, of San Francisco, the lowest of a large number of bidders, and, notwithstanding the fact that the bid was 40 per cent or more below schedule prices, the article furnished is excellent, and every disposition has been shown to treat the State fairly.

Several parties made application to me, when the old type was withdrawn from use, to purchase it. The Attorney-General and Controller advised me, however, that there was no law authorizing its sale, and that the next Legislature should be applied to for authority to dispose of it. Under these circumstances the old material was stowed away, though more money could have been realized from its sale at the time than it is probable will be obtained hereafter.

BUILDING, GROUNDS, ETC.

The last Legislature appropriated the sum of \$11,000 for enlarging, strengthening, and improving the Printing Office building. Proposals were duly advertised for, and the contract awarded to Siller Bros. for \$7,895—they undertaking to construct an addition to the main building seventy-five by forty feet. This contract carried out, the balance of the appropriation was expended in plumbing and iron work in the new part, and strengthening the old building with additional floor supports, etc.; the statements and bills filed with the Controller showing that but \$22 27 of the \$11,000 remained unexpended. In addition to this sum, we found ourselves at considerable expense to pay for the changing around of nearly all the machinery, painting and whitewashing the interior of the old portion of the building, and finally in enlarging the job office, which is now none too large for the demands upon it, though twice its former size.

The old elevator, worked by hand, and in a very dilapidated and unsafe condition, has been replaced by an excellent one, run by steam, and competent to perform any duty required of it.

The carpenter and machine shops have been enlarged and provided with necessary tools, though some of the larger implements are the property of the machinist, who has been willing to allow the State the use of them. We have also arranged a blacksmith shop, which is a great convenience.

The boiler at present in service is in good condition, but during the winter season a better quality of coal than is used in summer is required, because of the great quantity of steam necessary to heat the building. A new smokestack will have to be erected soon, the present one being burned out. Another pump should be procured for pumping out the cesspool, as the pump now in service is not adapted to the work.

The grounds have been greatly improved, and now are covered with a fine sod of Bermuda grass. Excellent drainage is secured by pipes leading to L and Fifteenth Streets. The fence surrounding the premises is scarcely creditable, but the State Capitol Commissioners will doubtless remedy that matter when funds are provided. The stable, also, is not in keeping with the admirable appearance of the main buildings and grounds. A new one should be built, or that now in use raised, given a new roof and covering of rustic, and painted to harmonize in color with the Printing Office.

TEXT-BOOK DEPARTMENT.

Table D shows the expenditures from the text-book appropriation from July 1, 1888, to June 30, 1889:

TABLE D.

Expenditures July 1, 1888, to June 30, 1889.

Monthly employés.....	\$2,990 00	
Bindery employés.....	15,464 95	
Composition employés.....	895 90	
Press-room employés.....	1,273 40	
Miscellaneous employés.....	1,702 50	
Electrotype employés.....	1,947 00	
Engraving employés.....	3,242 40	
		\$27,516 15
Paper.....		254 80
Permanent material.....		205 09
Repairs.....		70 37
Binding supplies.....		4,007 89
Ink.....		894 75
Coal.....		382 50
Gas.....		46 80
Water.....		90 00
Groceries, oils, etc.....		220 45
Hardware, etc.....		321 01
Rags, ice, washing.....		72 83
Horse feed and shoeing.....		38 57
Lumber.....		858 12
Advertising.....		198 03
J. D. Young (petty accounts).....		39 10
Freight and drayage.....		192 46
Miscellaneous.....		652 73
Total.....		\$36,061 65

Table E shows the expenditures from July 1, 1889, to June 30, 1890:

TABLE E.

Expenditures from July 1, 1889, to June 30, 1890.

Bindery employés.....	\$3,617 00	
Composition employés.....	837 25	
Press-room employés.....	1,573 40	
Miscellaneous employés.....	1,026 60	
Electrotype employés.....	1,742 00	
Engraving employés.....	3,390 80	
		\$12,187 05
Paper.....		10,896 56
Permanent material.....		2,171 80
Bindery supplies.....		3,104 28
Ink.....		800 80
Coal.....		270 00
Groceries, oils, etc.....		40 30
Lumber.....		104 18
Insurance.....		1,444 00
Engraving maps, cuts.....		2,006 00
J. D. Young (petty accounts).....		25 90
Miscellaneous.....		449 37
Total.....		\$33,500 24

Table F shows the amount of paper bought, consumed, and remaining on hand:

TABLE F.

State Text-Book Paper.

	Reams.	Sheets.	Value.
Amount on hand July 1, 1888, 80-lb. book.....	166	375	\$1,133 90
Amount purchased, 80-lb. plate*.....	28		224 00
Amount consumed, 80-lb. book.....	701		4,710 72
Amount consumed, 80-lb. plate*.....	28		224 00
Amount on hand June 30, 1889.....			
	Reams.	Sheets.	Value.
Amount on hand July 1, 1889.....			
Amount purchased, 80-lb. book.....	796		\$5,279 36
Amount purchased, 80-lb. plate†.....	755		5,617 20
Amount consumed, 80-lb. plate†.....	489		3,638 16
Amount on hand June 30, 1890, 80-lb. plate†.....	266		1,979 04
Amount on hand June 30, 1890, 80-lb. book.....	161	375	1,086 95

* Used for printing maps for History.

† Used for printing Elementary Geography.

STATE SCHOOL BOOK DEPARTMENT.

Table G shows the amount expended from July 1, 1888, to June 30, 1889:

TABLE G.

Expenditures from July 1, 1888, to June 30, 1889.

Bindery employés.....	\$36,464 45	
Miscellaneous employés.....	1,672 45	
Composition employés.....	487 50	
Press-room employés.....	5,867 70	
Monthly employés.....	382 50	
Electrotype employés.....	78 00	
		\$44,952 60
Paper.....		10,120 32
Bindery supplies.....		6,869 34
Ink.....		325 25
Coal.....		1,597 50
Gas.....		414 45
Water.....		45 00
Groceries and horse feed.....		120 19
Hardware.....		35 78
Rags and washing.....		19 62
Lumber.....		104 86
Miscellaneous.....		221 35
Total.....		\$64,826 26

Table H shows the amount expended from July 1, 1889, to June 30, 1890:

TABLE H.

Expenditures from July 1, 1889, to June 30, 1890.

Bindery employes	\$23,566 20	
Miscellaneous employes	2,256 20	
Composition employes	592 50	
Press-room employes	3,775 50	
Monthly employes	3,390 00	
Electrotype employes	108 00	
		\$38,689 15
Paper		14,161 44
Bindery supplies		13,762 69
Ink		1,853 00
Coal		1,552 50
Gas		193 20
Lumber		580 10
Groceries, hardware, oils		262 21
Advertising		208 00
Rags, ice, washing		89 25
Miscellaneous		293 25
Total		\$71,644 79

Table I shows the amount of paper purchased, consumed, and on hand:

TABLE I.

State School Book Paper.

	Reams.	Sheets.	Value.
Amount on hand July 1, 1888, 80-lb. book	1,458	175	\$9,916 78
Amount purchased, 80-lb. book	1,506		10,120 32
Amount consumed, 80-lb. book	2,316		15,553 52
Amount on hand June 30, 1889, 80-lb. book	648	175	4,356 26
	Reams.	Sheets.	Value.
Amount on hand July 1, 1889, 80-lb. book	648	175	\$4,356 26
Amount purchased, 80-lb. book	2,085		13,902 24
Amount purchased, 80-lb. plate*	32	200	259 20
Amount consumed, 80-lb. book	1,318		8,856 96
Amount consumed, 80-lb. plate*	29	200	235 20
Amount on hand June 30, 1890, 80-lb. book	1,417	175	9,523 94
Amount on hand June 30, 1890, 80-lb. plate*	3		24 00

* Used for printing maps for History.

Table J shows the number of each book manufactured in 1888-9, and the value:

TABLE J.

Books Manufactured 1888-89.

NAME OF BOOK.	No. Books.	Value.
First Reader	50,456	\$7,568 40
Second Reader	35,150	11,599 50
Third Reader	44,975	24,286 50
Speller	80,003	20,000 45
Advanced Arithmetic	39,738	16,689 96
English Grammar	30,036	12,615 12
United States History	49,662	34,763 40
Totals	330,020	\$127,523 33

Table K shows the number of each book manufactured in 1889-90, and the value:

TABLE K.

Books Manufactured 1889-90.

NAME OF BOOK.	No. Books.	Value.
First Reader	50,515	\$7,577 25
Second Reader	30,102	9,933 66
Primary Number Lessons	30,174	6,034 80
Advanced Arithmetic	30,104	12,643 68
English Grammar	30,147	12,661 74
United States History	25,037	17,525 90
Lessons in Language	50,069	12,517 25
Totals	246,148	\$78,894 28

Table L shows the number of books sold and donated in 1888-89, and their value:

TABLE L.

Books Sold and Donated 1888-89.

NAME OF BOOK.	Donated.	No. Books Sold.	Value Books Sold.
First Reader	40	63,004	\$9,450 60
Second Reader	142	49,095	16,201 35
Third Reader	40	33,021	17,831 34
Speller	40	54,370	13,592 50
Primary Number Lessons	56	36,562	7,312 40
Advanced Arithmetic	52	51,931	21,811 02
Lessons in Language			
English Grammar	181	45,181	18,976 02
United States History	292	26,422	18,495 40
Totals	833	359,586	\$123,670 63

Table M shows the number of books sold and donated in 1889-90, and their value:

TABLE M.

Books Sold and Donated, 1889-90.

NAME OF BOOK.	Donated.	Number Books Sold.	Value Books Sold.
First Reader		44,226	\$6,633 90
Second Reader		27,108	8,945 64
Third Reader		13,995	7,557 30
Speller		24,304	6,076 00
Primary Number Lessons		14,046	2,809 20
Advanced Arithmetic	1	19,463	8,174 46
Lessons in Language	290	30,569	7,642 25
English Grammar		13,471	5,657 82
United States History	1	10,730	7,511 00
Elementary Geography		487	243 50
Totals	292	198,399	\$61,251 07

Table N gives a recapitulation of all the expenditures of the various departments during the two fiscal years:

TABLE N.

Recapitulation of Money Expended.

State Text-book Fund, fortieth fiscal year.....	\$36,061 65	
State Text-book Fund, forty-first fiscal year.....	33,500 24	
		\$69,561 89
State Engineer's Irrigation Reports, fortieth fiscal year.....		3,685 25
State School Book Fund, fortieth fiscal year.....	64,826 26	
State School Book Fund, forty-first fiscal year.....	71,644 79	
		136,471 05
State Printing Fund, fortieth fiscal year.....	131,559 63	
State Printing Fund, forty-first fiscal year.....	116,377 42	
		247,937 05
Total.....		\$457,655 24

CONCERNING THE TEXT-BOOKS.

The sale of text-books has not been as large as anticipated, and the doubt arises whether all the schools of the State are complying fully with the law in using them. We have not experienced any difficulty in keeping a constant supply on hand, and on every book sold (except the First Reader) the State makes a small profit. I have deemed it advisable to keep in the warehouse at all times a sufficient number of books to last about a year. They wear better for being well seasoned, and in case the printing office was destroyed by fire, there would be in the fireproof building enough to fill all orders until the office was reconstructed.

The warehouse is not large enough. When all of the books of the series provided for by the Legislature have been published, and are kept on hand, there will scarcely be room for them in the structure, and none at all for paper and binding material. The walls of this building are sufficiently strong to sustain another story, which could be devoted to the books exclusively, while the first floor remained for the storage of stock. A passageway from the bindery to the upper story of the warehouse would facilitate the handling of the books, saving much time and trouble.

The Elementary Geography has been issued during the year, and is a very creditable production. Engravings and maps for the large Geography are now being prepared, but necessarily this is work to be performed slowly and carefully. The Physiology is nearly completed, and will be issued during the ensuing winter. The work on Civil Government will probably be ready for the beginning of the next school year.

The last Legislature appropriated money for the purchase of Matthew Cooke's book on "Insects, Injurious and Beneficial," and the plates are now the property of the State. It cannot be adopted as one of the State's series of text-books, however, without further action of the Legislature. So much has been learned by horticulturists of late years concerning the subject the book treats of, however, that it is quite probable it will have to be revised before adoption as a text-book.

When I took charge of the office there was frequent complaint as to the manufacture of the school books, the material used being inferior in quality, and the binding poor. The material throughout is now, and has been for the past two or three years, fully equal to that used by any

school book publishers, and superior to some, while the printing and binding are such that no adverse criticism is now heard on that score from those who know what they are talking about.

Respectfully submitted.

J. D. YOUNG,
Superintendent of State Printing.

REPORT

OF THE

STATE BOARD OF EQUALIZATION

FOR 1889 AND 1890.

STATE BOARD OF EQUALIZATION.

C. E. WILCOXON, Chairman.

JOHN T. GAFFEY,

GORDON E. SLOSS,

L. C. MOREHOUSE,

JOHN P. DUNN, Ex Officio.

E. W. MASLIN, Secretary.



SACRAMENTO:

STATE OFFICE, : : : : : J. D. YOUNG, SUPT. STATE PRINTING.

1890.

REPORT.

OFFICE OF THE STATE BOARD OF EQUALIZATION, }
SACRAMENTO, December 1, 1890. }

To his Excellency R. W. WATERMAN, Governor:

SIR: Two years ago this Board, in its report to you, made several recommendations of changes to be made in the revenue law of the State, but the Legislature paid no attention to our advice.

It is imperative that Section 3897 of the Political Code should be amended. That section provides that "whenever the State shall become the purchaser of property sold for taxes, the State Board may direct the District Attorney to bring an action to recover the possession of the same. In case of judgment for the recovery of the same, the Board of Equalization may order the property so recovered to be sold by the County Treasurer, under such regulations as they may prescribe."

This office receives each year lists of property sold to the State. The law prescribes that the property shall be assessed the next year, but not sold; and if not redeemed, it shall not be again assessed. After the second assessment, and after the sale of other property, the deed is made to the State and filed in the County Treasurer's office.

Apparently it is our duty to sell the property, but we are powerless in the premises. As is seen, before we can sell, judgment of possession must be obtained. And here lies the evil. The delinquent taxpayer is usually a non-resident and unknown to the officers, hence service of summons must be had by publication, and before the Court orders service of summons it must appear to the Judge thereof, by affidavit, that the defendant is absent from the State, or, after due diligence, cannot be found. District Attorneys will not make the affidavit, having no knowledge of the subject. Even if the order for publication of summons is made, there is no fund provided for the payment of the cost of advertising the same. In a few cases the parties who want the land are willing to advance the costs, but such a proceeding is not to be countenanced. As there are no sales of the land or change of ownership, thousands of dollars in value of land are annually withdrawn from the assessment roll. The section should be amended so as to authorize the Controller to sell the property, at any time after time for redemption has expired, to any person applying, upon payment of the taxes for each year and costs, or at public auction. If it be thought necessary to have a judgment for possession, summons should be had by publication at the Court House door, an order being made to that effect by the Court, upon application by the District Attorney, without an affidavit.

GROWING CROPS.

The Legislature passed an Act, approved March 16, 1889, after the assessment had been begun, amending Section 3617 of the Political Code so far as to define the term "growing crops," as follows:

"The term 'growing crops' includes all growing crops, cereals, vines, nut-bearing, fruit, and ornamental trees."

We immediately issued a circular to the Assessors advising them that the Act, so far as it enlarged the term of "growing crops," was clearly unconstitutional.

The Board, although it might be inclined to favor the exemption of trees from taxation, was of the opinion that the Constitution did not intend to include in the term "growing crops" any other growth than such as required annual seeding, or such product as was harvested entirely each year.

A tree is not a growing crop. No one gathers a tree for sale. The product of a tree is the crop, and by climatic necessity is not assessed. We are fortified by a decision of the Supreme Court of this State, and until that decision is overruled trees and vines must be assessed. The case is entitled *Cottle vs. Spitzer*, and may be found in 65 Supreme Court Reports, page 456.

Cottle sued out a writ against Spitzer, the Assessor of Santa Clara County, to restrain him from assessing fruit trees, claiming that they were "growing crops" and by the Constitution exempt from assessment. The Superior Court of Santa Clara County held "that by the term 'growing crops' nothing more would be understood than products from annual plants or cereals, and the latter appears to be the sense in which the term is employed in technical legal parlance. It may be conceded that in this State the word 'crop,' taken in its most comprehensive sense, includes *fruit* grown on trees, but we think it can be affirmed without serious contradiction that *trees* themselves never have been included in the term." The case was appealed to the Supreme Court, which adopted the language of the Superior Court and affirmed the decision. Such is the law to-day as interpreted by the Supreme Court, and it is not competent for the Legislature, by the enactment of a statute, to change the meaning of or construe other than as the Court construes a clause of the Constitution.

We have been criticised for our action by some hasty minds, but as the law imposes upon us the duty to define the duties of Assessors, and to see to it that all property is assessed, our line of action was sufficiently plain.

It is true that there is wide dissatisfaction with the present system of assessing improvements in the nature of trees and vines, and much can be said in favor of exempting such property from assessment.

While, in a general sense, horticulture is an exceedingly profitable business, it is not, by any means, certain that the special orchard or vineyard may be valuable. The planter has to wait for from three to six years before he can know whether his land is suitable for the production of the fruit selected. We are all experimenting more or less, and no one can aver, with certainty, that such and such an orchard will be profitable. Indeed, we have in mind some places where the planting entailed a loss, because it was ascertained that the soil and climate were not congenial to the planted trees; nevertheless, the owner had been assessed for a supposed value of growing trees.

It must be conceded that the framers of the Constitution, in exempting "growing crops" from assessment, were guided by the knowledge of the uncertainty of farming and offered the exemption as a species of protection to the farmer. The motive which instigated the exemption

was a noble one; but the promise is a barren one, since on the first Monday in March, there are no growing crops sufficiently advanced to have any precise and ascertainable value. Why not, therefore, if farming simple is to be protected, extend the same protection to the horticulturist, who, instead of ascertaining his loss within the current year, has to wait the longer period of at least three years before, even if fortunate in planting, he can begin to realize a profit.

We commend these thoughts to your Excellency, and would recommend that the Act in question be repealed, and the original section be reenacted for the sake of certainty; and, further, to satisfy a large body of industrious and enterprising people, who believe that they are unjustly taxed, that the Legislature submit to the people an amendment to the Constitution expressly exempting fruit trees and vines from assessment for five years from the first planting.

MORTGAGES.

At the last session of the Legislature a proposed amendment to the Constitution was submitted which proposed the exemption of mortgages from assessment, but which was not adopted. Doubtless, the matter will be again submitted. For the past few years public attention has been attracted to the question of the economy of assessing mortgages, and we have received from many of the States letters inquiring as to the working of the assessment of such securities.

At the time of the adoption of the Constitution, there was great public excitement about the taxation of capital. The demand was made, and acceded to, that mortgages should be assessed as a contribution of capital to the burden of State and county taxation. To secure the mortgagor from the inequitable taxation of his land while held as a security for a loan, which might, or was presumed to be expended upon the land, or be for a part of the purchase price, it was provided that, for the purpose of taxation, the mortgage was to be deemed an interest on the land, and the amount of the mortgage deducted from the value of the land; the mortgagee paying the tax on the remainder. This system was intended to avoid double taxation and to benefit the borrower. It has not met the anticipation of its promoters. On the contrary, it is an engine of oppression to the very class it was intended to benefit. It is well known that the various banks have a certain fixed rate of interest, varied only by the location of the property offered for security, whether in the city or country. We will suppose, as is generally the case, the rate for a loan upon country property is 8 per cent. "A" proceeds to the bank to secure a loan. The first question asked is: What in your county has been the rates for State and county taxes for several years past? The answer is given, and the highest rate is added to the rate of interest. We will suppose it is \$1 60 on each \$100. The rate becomes 9.6 per cent, but the bank to meet contingences and avoid fractions of interest demands 10 per cent. Thus, the borrower actually pays to the bank the assessment upon the mortgage in the shape of interest and, also, invariably pays in such shape, a higher rate of taxation than the State otherwise would demand of him. Again, it often occurs, more often than the public is aware, that the mortgage is given for more than the sum at which the property is assessed.

We will not pause to state the reason for such reduction of assessment;

sufficient, for the discussion, that such is the case. As the mortgage is to be treated as "an interest in the property," it follows that the property is first valued as an unit, and such value is apportioned by the Assessor, respectively, to the mortgagor and mortgagee. The mortgage cannot be assessed at a higher value than the property.

Observe what follows: the mortgagor is paying the supposed tax on the whole sum of the mortgage in the form of increased interest, while the mortgagee is only paying the tax on the value of the property affected. The mortgagee thus receives the whole of his interest, and also the difference between the tax on his mortgage, which he pays, and the sum which the mortgagor pays him to pay the tax on the whole sum, but which he (the mortgagee) does not pay.

Again, every time a mortgage is assessed the description is doubled; the double assessment is carried into the duplicate assessment roll, and the cost of assessing each specific piece of mortgaged property is at least twice what it would be if otherwise.

Another condition often exists by which an unjust burden is put upon the borrower. Suppose he should borrow on the first of April \$1,000. From that date he is paying, as we showed before, the supposed taxation added to the net interest. But the mortgage is not assessed until the succeeding first Monday in March, and the tax thereon is not paid until the succeeding December.

Hence, the borrower pays the additional, say, 2 per cent from April to March to the loaner, which the latter does not pay to the State and withholds it to his own profit.

From the beginning to the end, turn whichever way he may, the debtor is wronged.

The subject of the mortgaged debt of the various States during the census year has excited attention. We have no means of ascertaining the amount of county and city indebtedness, respectively. The mortgages are reported to us simply as upon land. As our contribution to the literature of the subject, we exhibit the following table, which shows, since 1880, the value of the mortgages, the value of the whole real estate and improvements assessed, and the per cent of the mortgage value of the real estate and improvements value:

YEAR.	Amount of Mortgages.	Value of Real Estate and Im- provements.	Percentage of Mortgages to Value of Real Estate and Im- provements.
1880.....	\$96,811,171	\$460,694,217	21.01
1881.....	82,083,826	464,082,851	17.68
1882.....	85,349,263	446,319,940	18.59
1883.....	93,833,614	555,571,302	15.36
1884.....	110,727,277	603,884,639	15.54
1885.....	145,873,988	639,275,352	22.81
1886.....	158,606,635	616,458,468	25.73
1887.....	168,060,090	743,750,208	22.73
1888.....		892,033,953	16.35
1889.....		903,544,292	17.55
1890.....		890,614,099	18.87

This table would be more useful if the Assessors, as they were requested to do, had reported the value of the property affected by the mortgages, by which we could tell upon what margin loans were

made. No reports (satisfactory) were made of mortgages in 1881, 1885, or 1887.

There has lately been some criticism about the immense mortgage indebtedness which the people of the State are assuming. The danger of over indebtedness is more apparent than real. It is true that in 1890 we have a mortgage debt of a hundred and sixty-eight millions, and that in 1880 there was only a fraction less than ninety-seven millions. But it must be remembered that the assessed value of the real estate in 1880 was \$460,694,217, while in 1890 it is \$890,614,099. In other words, the percentage of mortgages to the assessed value of the whole land and improvements assessed in 1880 was 21.01, while in 1890 it is 18.87, showing a much more healthy financial condition. We believe the loans made to-day maintain a less ratio to the value of the land than they did in 1880. In 1880 there was a sudden bound into a "full cash value," which, in some localities, exceeded the true cash value. Values have settled down permanently, and the assessment of 1890 is below the true value of the property. Within the past decade California has made wonderful strides in rural industries. She has seen the rise and progress of the fruit industry to such an extent as to excite the marvel of her most conservative citizens. Thousands upon thousands of acres have been planted to fruit trees and vines; extensive and costly improvements have been made, the extent of which will be exceeded in magnitude in the next decade.

We have not ascertained the amount of the mortgages on purely country realty, but in the coming year we shall take steps to present a full and precise statement of the question. Assuming, even for the sake of argument, that the country mortgages have exceeded in increasing ratio those upon city property, the fact proves nothing; at least, it does not prove that the farming community is overburdening itself. As we said, the past few years have witnessed an active interest in fruit culture; many persons engaged in business in cities and towns have invested in country property with the purpose of planting to fruit, either as a source of profit or with a view to securing a home to which they can retire after surrender of business. These new projects have involved expense, which ultimately will be repaid by the profits of the venture. It must be considered, when discussing the outcome of country indebtedness, that the capital loaned is domestic capital, and that California, unlike the Western States, does not send the interest out of the State, but that it remains within her borders to be used again to stimulate other industries. California can be compared favorably with other States. The percentage of mortgages to the total realty valuation is 18.87. Michigan shows a mortgage debt of \$129,229,553 and a realty valuation of \$686,614,741—mortgages being 18.84 per cent.

In Illinois the total amount of real estate mortgages in 1887 was \$381,322,339, and the assessed value in 1880 was \$575,441,053. This seems strikingly to be out of proportion, but is explained further on by the difference in the ratio of assessment to full value.

Ohio has a mortgage debt of \$390,990,000, and the assessment of realty is \$1,220,262,000; the mortgages being 32.04 per cent. In an article in "The Political Science Quarterly" for March, it is stated that property in Illinois is assessed on the average at 25.44 per cent of its true value; in Michigan at 37.79 per cent. The mortgage debt, therefore, stands as follows: Illinois, \$381,322,339 of debt on \$2,262,000,000 of realty; Michigan, \$129,229,553 of debt on \$1,143,000,000 of realty. The ratio of

assessment of realty in California is about 75 per cent, on the average, of its true value. The case will stand, therefore, as to this State, \$168,060,090 debt on \$1,187,485,465 of realty. The percentage of mortgages to the value of the realty is: Illinois, 16.85 per cent; Michigan, 11.30, and California 14.15 per cent. The significant fact must be noticed that the foreclosure suits in this State are insignificant in comparison with those of the Western States. In the Western States named there are no public lands opened for settlement, and the mortgages represent a debt upon a settled and developed value. The following table shows that since 1880 five million seven hundred and twenty-two thousand eight hundred and seventy-four acres of land have been added to the assessment roll:

YEAR.	Acres Assessed.
1880	26,116,080
1881	26,890,951
1882	26,252,622
1883	26,835,060
1884	27,850,798
1885	28,567,832
1886	28,983,688
1887	29,353,194
1888	30,705,736
1889	31,230,802
1890	31,838,954

This shows that we are opening up new fields for culture, and which call for increased expenditure of capital, and explains, in some measure, the increase of the mortgage debt.

After all, while we have not so much at present to fear from the amount of mortgage indebtedness, yet it is well to sound the note of warning against a too rapid increase of debt.

PERSONAL PROPERTY ASSESSMENT.

To those who are interested in the equitable adjustment of taxation, it may be interesting to glance at the relation which personal property bears to the total assessment, exclusive of money, solvent credits, and railroad assessments.

The following table shows, since 1880, the assessment of purely personal property, exclusive of money and solvent credits, real estate and improvements, and the per cent of personal property to the sum total of valuation of such property:

YEAR.	Personal Property.	Real Estate and Improvements.	Per Cent of Personal Property.
1880	\$128,943,304	\$460,694,217	21.8
1881	134,000,000	464,082,851	22.4
1882	112,856,281	446,319,940	20.2
1883	142,925,484	555,571,302	20.4
1884	140,175,668	603,884,639	18.8
1885	148,127,925	639,275,352	18.8
1886	129,258,814	616,458,468	17.3
1887	139,138,308	743,759,208	15.6
1888	144,167,994	892,033,953	13.9
1889	143,415,535	903,544,292	13.7
1890	143,733,183	890,614,099	13.9

Thus it will be seen that in 1880 the total assessment of real estate and personal property was \$589,637,521, and the percentage of personal property to the whole value was 21.8, and the total assessment in 1890 is \$1,044,347,282, and the per cent of personal property is 13.9. Thus, the value of real estate has increased 93.3 per cent, while the value of personal property has increased only 11.5 per cent. There is certainly either a wrong perpetrated on the part of the taxpayer, or the Assessors are guilty of great negligence or ignorance in affixing the value.

Take "goods, wares, and merchandise," for example. Certainly the supply should keep pace with the increase of population. Since 1880 the population has increased 46 per cent, while the increase of valuation of goods and merchandise in 1890 over that of 1880 is 27 per cent, and over that of 1883 of only 6.6 per cent. Merchandise was assessed as follows: In 1880, \$27,650,184; 1882, \$28,903,860; 1883, \$32,954,572; 1884, \$34,449,166; 1886, \$30,755,495; 1887, \$32,722,933; 1888, \$34,803,462; 1889, \$35,620,993; and in 1890, \$35,149,996.

This naturally suggests the recommendation made in a former report, and we earnestly urge upon the Legislature the necessity of taking some steps to compel a just assessment of all personal property.

The report says:

There is undoubtedly an inequality between the assessment of land and personal property, and also between personal property visible to the Assessor and capable of being valued by him, and the goods and merchandise of the merchant which the Assessor cannot see.

The real estate of the farmer and the city lot owner is exposed to view, and its value cannot be concealed from the Assessor. But the merchant is his own assessor. The Assessor cannot even view the wares, since the taxed person is only required to state the goods he had on hand on the first Monday in March. It has been, and still is, the custom not to demand an invoice of the goods. The oath administered to each person assessable is to the effect that the statement contains a true account of his property, but he is not required to state its value. Each farmer is asked the number of horses, cows, etc., and testifies under oath to the statement. In respect to the merchant, there is no effort made to ascertain the quantity of goods assessable. The Assessor merely asks him the value, which question the merchant may or may not answer, as he pleases. The remedy is difficult to suggest. It is certainly true that the merchant should not be his own assessor. Means should be provided whereby the quantity and value of the merchandise should be disclosed. There would be no hardship if the law should provide that each person having personal property on the first Monday in March, not exposed during assessment time to the inspection of the Assessor, should make an inventory of the same on that day and be required to make oath to the amount and the value of the same.

STATISTICS.

At no time in the history of the State is the necessity more paramount for an intelligible, precise, and authentic presentation of the industrial resources of the State. The necessity of an increase of population in the State is conceded by every one. Those looking westward for homes desire to know, before risking their all, the amount of available land, the products of the soil, the profits of tillage of the soil, and the ratio of taxation. Private enterprise has done much towards attracting immigration to the State, but we are deficient in the literature of the subject of the resources of the State presented under authority.

We have, as have former Boards, endeavored to collect from Assessors such statistics as were thought to present the State in her true light, but we have not occupied the field. The fact that the statistics are gathered at the time of assessment militate against ascertaining the exact truth.

The Assessor's salary is not sufficient to enable him to do the work, and the Legislature should make provision for the payment of such

additional deputies as may be necessary to perform the work required by this Board.

Again, some of the Assessors are extremely indifferent to the request of the Board. For instance, the Los Angeles Assessor this and last year failed to report the acreage of grapes. A failure of one Assessor to report destroys the whole value of the report. We have to urge upon the Legislature the fixing of a penalty upon the Assessor for failing to report upon the matters required by this Board.

COLLECTION OF TAXES.

The Act of 1883, relating to the assessment of railroads and the collection of taxes from railroad companies, confided to the Controller the collection of the taxes. Although the payment of taxes at the city of Sacramento is a convenience to the companies, yet the actions to collect the taxes by the Controller were resisted by some of the companies. The Supreme Court of the State decided that the Act is unconstitutional so far as it confers such power on the Controller, because it conflicts with Sub. 10, Sec. 25, Art. IV, of the Constitution, which forbids the Legislature to pass special laws for the assessment or collection of taxes.

The Act of 1883 provided that this Board shall prepare each year "duplicate records of the assessment and apportionment of assessments," and file the same with the Controller. If the Controller is not authorized to collect the taxes, the filing of such duplicates is useless work. The law needs revision so as to place the citizen and the railroad companies on a level, and in such revision it will be well to consider whether it will be wise to offer for sale in sections, railroads operated in more than one county, or whether it will not be better to subject all property delinquent for taxes to judicial process to collect the taxes.

Our terms of office are about to close. To equitably and perfectly adjust the assessment of values is a labor no body of men may hope to perform. There will always be conflicting interests and values. Testimony will be darkened and clouded by selfish interests. We may, and doubtless have committed errors. No county values can be increased without inflicting individual injustice, hence we have endeavored to encourage Assessors to increase values, and to support them in their efforts, rather than to increase the valuation after the assessment shall have been made. Much remains yet to be done before the values of this State are substantially placed upon a true, full cash value, but we have done the best we could, and surrender our offices, conscious that we have endeavored faithfully to discharge the trust reposed in us.

C. E. WILCOXON.
L. C. MOREHOUSE.
G. E. SLOSS.
JOHN T. GAFFEY.
J. P. DUNN.

TAXATION FOR 1889 AND 1890.

VALUATIONS AND RATES OF TAXATION.

SCHEDULE A.

Showing Amount of Property upon which the State Rate of Taxation was Based, and the Rates for 1889 and 1890.

1889.

Value returned by Auditors	\$1,102,059,276
Decrease by Board	\$28,128,909
Increase by Board	595,003
Total decrease	27,533,906
Net amount of assessment	\$1,074,525,370
Railroad assessment by Board	40,488,652
Amount upon which tax is based	\$1,115,014,022

Amount to be Raised for Forty-first Fiscal Year.

		Rate.
General Fund	\$4,822,970	.492
School Fund	1,893,500	.193
Grammar School Course Fund	75,000	.007
Interest and Sinking Fund	200,000	.200
University Fund .....		.010
	\$6,991,470	.722

1890.

Value returned by Auditors	\$1,060,390,296
Reduction of Orange County	816,044
Net assessment	\$1,059,574,252
Railroad assessment by Board	40,198,652
Amount upon which tax is based	\$1,099,772,904

Amount to be Raised for Forty-second Fiscal Year.

		Rate.
General Fund	\$3,199,040	.330
School Fund	1,893,500	.195
Grammar School Course Fund	75,000	.007
Mendocino Insane Asylum Fund	175,000	.018
Interest and Sinking Fund	200,000	.020
University .....		.010
	\$5,542,540	.580

SCHEDULE B.

Showing Assessments by Assessors and Amount of Reduction and Addition by Board.

1889.

COUNTIES.	Assessment.	Per-centage.	Reduction.
Fresno	\$37,127,646	10	\$2,910,147
Los Angeles	100,658,486	10	8,987,763
San Bernardino	20,198,348	5	763,289
San Diego	32,259,289	10	2,823,225
San Francisco	306,040,405	5	12,644,485
Reduction			\$28,128,909
Increase—Santa Barbara	14,677,090	5	595,003
Total decrease assessment			\$27,533,906

SCHEDULE C.

Showing Assessment by Assessor and Amount of Reduction by Board.

1890.

COUNTY.	Assessment.	Per-centage.	Reduction.
Orange	\$9,018,748	10	\$816,044

VALUATIONS FOR 1889.

SCHEDULE D.

Showing Value of Real Estate and Improvements, after Equalization by Board, for 1889.

COUNTIES.	Value of Real Estate other than Lots.	Value of City and Town Lots.	Improvements on Real Estate, etc.	Improvements on Lots.	Value of all Real Estate and Lots.	Value of all Improvements.
Alameda	\$16,837,374	\$27,260,038	\$3,016,665	\$16,066,460	\$44,097,412	\$19,083,125
Alpine	144,513	1,446	68,222	6,380	145,959	74,602
Amador	2,053,495	192,330	684,160	531,815	2,245,825	1,265,975
Butte	13,845,796	1,003,335	950,110	1,310,635	14,849,131	2,260,745
Calaveras	2,204,705	73,130	754,105	315,535	2,277,835	1,069,640
Colusa	18,548,065	373,375	903,850	755,525	18,921,440	1,639,375
Contra Costa	9,271,468	438,339	1,861,231	573,294	9,709,807	2,424,525
Del Norte	1,226,966	52,435	172,575	135,440	1,279,401	308,015
El Dorado	1,632,580	126,220	667,830	326,510	1,758,800	994,340
Fresno	21,693,965	5,765,895	1,747,894	1,560,921	27,459,890	3,308,815
Humboldt	10,862,608	1,822,130	1,207,366	1,326,460	12,684,738	2,533,826
Inyo	479,380	45,134	269,058	106,085	524,514	375,143
Kern	6,558,374	709,270	384,940	333,290	7,267,644	738,230
Lake	2,339,521	212,673	526,868	224,360	2,612,194	751,228
Lassen	1,085,618	43,467	328,061	108,526	1,129,065	436,587
Los Angeles	24,844,043	40,151,313	3,273,552	14,269,941	64,965,352	17,542,493
Marin	5,994,508	1,352,185	934,585	1,077,462	7,346,693	2,012,047
Mariposa	1,124,410	19,113	257,642	67,054	1,143,523	324,696
Mendocino	7,593,306	456,635	1,042,330	637,830	8,049,941	1,700,160
Merced	10,239,883	913,176	418,601	412,860	11,153,059	831,461
Modoc	1,032,859	43,654	438,152	175,454	1,076,513	613,006
Mono	1,828,295	12,178	213,912	66,195	340,473	280,107
Monterey	8,905,495	1,331,155	927,725	734,290	10,236,650	1,682,015
Napa	6,094,557	941,075	2,576,640	1,498,454	7,035,632	4,075,074
Nevada	2,147,680	288,310	1,053,010	875,050	2,435,990	1,928,060
Placer	4,454,050	341,488	1,065,466	731,756	4,825,538	1,827,222
Plumas	1,163,869	36,777	406,433	153,910	1,200,645	560,393
Sacramento	13,141,230	6,531,330	1,695,125	6,490,035	19,672,560	8,135,160
San Benito	3,979,115	231,335	439,750	235,480	4,210,450	755,230
San Bernardino	9,531,124	3,861,104	1,883,983	2,114,000	13,392,228	3,997,983
San Diego	8,328,324	13,254,254	662,788	3,749,024	21,582,578	4,401,812
San Francisco	27,767,837	162,384,561	106,559	65,406,398	165,062,398	65,513,059
San Joaquin	22,700,862	4,330,728	1,474,311	3,565,256	27,040,590	5,039,567
San Luis Obispo	9,170,977	1,471,623	751,752	729,074	10,642,600	1,430,823
San Mateo	8,679,660	985,435	2,145,265	479,135	9,665,095	2,624,400
Santa Barbara	7,979,501	3,464,894	732,040	1,331,116	11,444,395	2,063,156

Santa Clara	24,583,680	11,440,881	5,282,100	5,202,220	36,024,561	10,484,320
Santa Cruz	4,628,940	2,422,490	963,640	1,076,205	7,051,430	2,029,845
Shasta	2,610,802	448,362	592,567	392,489	3,059,164	985,063
Sierra	737,451	48,900	261,200	232,359	786,551	493,559
Siskiyou	2,190,205	170,110	952,740	363,372	2,363,315	1,316,112
Solano	12,515,938	805,860	1,513,379	1,453,906	13,321,798	2,367,285
Sonoma	16,900,823	2,978,860	3,785,743	2,833,270	18,879,683	6,619,013
Stanislaus	11,026,326	659,190	835,886	826,594	11,685,616	1,632,480
Sutter	7,730,499	108,541	604,812	132,635	7,839,940	737,447
Tehama	7,077,775	672,865	755,721	675,029	7,750,640	1,430,750
Trinity	7,504,907	26,822	194,094	67,965	531,729	261,759
Tulare	16,893,085	1,118,651	1,134,435	914,954	18,011,389	2,049,389
Tuolumne	1,105,335	110,170	519,480	305,855	1,215,505	825,335
Ventura	4,813,873	874,331	352,027	487,350	5,688,204	839,377
Yolo	13,821,596	959,835	1,004,032	1,319,494	14,781,431	2,323,526
Yuba	3,416,870	521,175	388,580	977,050	3,988,045	1,365,630
Totals	\$398,562,118	\$303,888,583	\$55,202,042	\$145,891,549	\$702,450,701	\$201,093,591

SCHEDULE F.
Showing Value of all Property, after Equalization by the Board, for 1889.

COUNTIES.	Value of Real Estate and Improvements.	Personal Property, except Money and Credits.	Money and Solvent Credits.	Value Preceding Columns.	Railroad Assessment.	Total Value of all Property.
Alameda	\$63,180,537	\$6,451,155	\$234,689	\$69,866,381	\$2,030,651	\$71,897,032
Alpine	220,561	57,415	4,859	282,835		282,835
Amador	3,511,800	666,774	30,715	4,208,289	72,680	4,281,969
Butte	17,103,876	2,321,469	447,895	19,879,180	831,072	20,730,252
Calaveras	3,347,475	424,370	46,765	4,218,610	95,661	4,314,271
Colusa	20,580,815	2,496,957	571,965	23,649,737	723,298	24,372,995
Contra Costa	12,134,332	2,370,881	108,571	14,613,784	578,728	15,192,512
Del Norte	1,587,416	289,263	47,822	1,924,501		1,924,501
El Dorado	2,753,140	777,495	71,155	3,601,790	277,547	3,879,337
Fresno	30,768,675	3,221,389	227,435	34,217,499	1,892,844	36,110,343
Humboldt	15,218,564	2,486,010	732,068	18,436,642		18,436,642
Inyo	809,637	483,140	9,215	1,392,012		1,392,012
Kern	8,005,874	2,176,198	95,963	10,278,035	134,683	1,560,695
Lake	3,363,422	592,737	67,125	4,023,284	1,554,630	11,832,665
Lassen	1,565,672	809,294	70,740	2,445,706		4,023,284
Los Angeles	82,537,849	8,883,511	747,363	91,668,723	77,458	2,523,164
Martin	9,358,740	1,206,651	53,292	10,618,683	2,981,511	94,650,234
Mariposa	1,468,219	369,402	11,020	1,848,641	489,974	11,108,657
Mendocino	9,750,101	1,980,665	213,499	11,944,265		1,848,641
Merced	11,984,520	1,479,180	55,653	13,519,353		11,944,265
Modoc	1,690,119	1,189,383	113,582	2,963,084	640,534	14,159,887
Mono	620,580	237,877	8,881	867,338		2,963,084
Monterey	11,898,665	2,264,675	101,370	14,264,710	71,317	938,655
Napa	11,116,766	2,275,042	604,995	13,996,753	1,262,243	15,526,953
Nevada	4,364,050	1,100,640	232,815	5,697,505	969,658	14,960,181
Placer	6,652,760	1,217,358	267,086	8,137,204	610,480	6,307,985
Plumas	1,761,039	510,895	37,567	2,309,441	1,980,856	10,118,060
Sacramento	27,857,720	5,028,430	405,550	33,291,700		2,300,441
San Benito	4,965,680	1,048,280	141,446	6,155,405	1,168,304	34,460,004
San Bernardino	17,390,211	1,818,731	226,117	19,435,059	177,236	6,332,641
San Diego	25,984,390	3,343,004	108,670	29,436,064	3,577,634	23,012,693
San Francisco	320,575,457	45,934,480	16,885,983	393,395,920	2,513,301	31,949,365
San Joaquin	32,080,157	4,482,909	456,649	37,019,675	116,765	203,512,685
San Luis Obispo	12,123,426	2,206,118	247,103	14,576,647	1,782,931	38,802,606
					546,639	15,123,346

San Mateo	12,289,495	1,055,235	318,960	13,663,690	252,047	13,915,737
Santa Barbara	13,507,551	1,669,417	95,125	15,273,083	468,314	15,740,407
Santa Clara	46,508,881	4,637,913	813,222	51,940,016	1,233,563	53,193,579
Santa Cruz	9,061,275	1,321,475	94,205	10,476,955	653,275	11,160,230
Shasta	4,044,250	1,045,058	78,723	5,168,011	1,429,992	6,598,003
Sierra	1,279,910	311,290	44,179	1,635,379	43,969	1,679,378
Siskiyou	3,685,427	1,586,753	244,558	5,516,738	1,449,156	6,965,894
Solano	16,289,083	2,412,501	177,355	18,884,919	1,132,785	20,077,702
Sonoma	25,498,696	3,834,372	536,903	29,869,971	1,352,300	31,222,271
Stanislaus	13,347,696	2,016,150	158,046	15,522,192	759,545	16,281,737
Sutter	8,576,487	1,126,487	133,485	9,836,459	174,219	10,010,678
Tehama	9,181,390	1,746,900	109,600	11,037,890	863,565	11,901,255
Trinity	793,488	303,683	56,183	1,153,354	1,153,354	1,153,354
Tulare	20,061,125	2,877,522	183,728	23,122,375	24,439,353	24,439,353
Tuolumne	2,040,840	601,105	74,520	2,716,465	547,273	2,716,465
Ventura	6,527,581	1,320,984	199,754	8,047,599	1,204,917	8,594,872
Yolo	17,104,957	2,179,677	415,360	19,699,994	334,401	20,904,911
Yuba	5,303,675	1,262,075	146,165	6,711,915		7,046,316
Totals	\$803,544,292	\$143,415,535	\$27,565,543	\$1,074,525,370	\$40,488,652	\$1,115,014,022

SCHEDULE F.

Showing Assessment and Apportionment of Railways for 1889.

Name of each Railway Assessed, and Name of the County to which Assessment is Appor- tioned.	Number of Miles of Railway Operated in the State.	Number of Miles of each Rail- way in each County.	Value per Mile of each Railway.	Total As- sessment of each Railway.	Amount of Assessment of each Rail- way Appor- tioned to each County.
California Central.....	253.40		\$5,919 49	\$1,500,000	
San Bernardino.....		60.30			\$356,946
San Diego.....		57.30			339,187
Los Angeles.....		135.80			803,867
California Pacific.....	112.50		22,222 22	2,500,000	
Napa.....		41.00			911,111
Sacramento.....		0.50			11,111
Solano.....		40.00			888,889
Yolo.....		31.00			688,889
California Southern.....	210.60		5,223 17	1,100,000	
San Bernardino.....		99.75			521,011
San Diego.....		110.85			578,989
Central Pacific.....	746.76		17,408 53	13,000,000	
Alameda.....		83.14			1,447,346
Butte.....		45.00			783,384
Fresno.....		60.13			1,046,775
Merced.....		36.75			639,764
Nevada.....		30.25			526,608
Placer.....		112.75			1,962,813
Sacramento.....		41.00			713,750
San Francisco.....		2.46			42,825
San Joaquin.....		56.75			987,935
Santa Clara.....		8.50			147,973
Shasta.....		82.08			1,428,893
Sierra.....		2.15			37,428
Siskiyou.....		83.18			1,448,042
Stanislaus.....		22.63			393,955
Sutter.....		10.00			174,085
Tehama.....		40.54			705,742
Tulare.....		13.58			236,408
Yuba.....		15.87			276,274
Northern California.....	25.90		4,826 25	125,000	
Butte.....		13.90			67,085
Yuba.....		12.00			57,915
Northern Railway.....	385.25		9,085 00	3,500,000	
Alameda.....		10.50			95,393
Amador.....		8.00			72,680
Calaveras.....		9.80			89,033
Colusa.....		79.61			723,258
Contra Costa.....		23.75			215,769
El Dorado.....		30.55			277,547
Napa.....		6.43			58,417
Sacramento.....		48.75			442,894
San Joaquin.....		29.80			270,783
Solano.....		33.45			303,894
Sonoma.....		30.52			277,274
Tehama.....		17.29			157,080
Yolo.....		56.80			516,028
San Francisco & North Pacific.....	89.50		13,407 82	1,200,000	
Marin.....		16.49			221,095
Sonoma.....		73.01			978,905
Southern Pacific.....	1,493.77		10,041 70	15,000,000	
Alameda.....		1.40			14,058
Calaveras.....		.66			6,628
Contra Costa.....		36.10			362,506
Fresno.....		84.13			844,809
Kern.....		153.47			1,541,101
Los Angeles.....		216.86			2,177,644
Monterey.....		125.70			1,262,243
San Benito.....		17.65			177,236
San Bernardino.....		261.47			2,625,605
San Diego.....		158.85			1,595,125
San Francisco.....		7.36			73,907
San Joaquin.....		52.11			523,273
San Luis Obispo.....		33.25			333,887
San Mateo.....		25.10			252,047

SCHEDULE F—Continued.

Name of each Railway Assessed, and Name of the County to which Assessment is Apportioned.	Number of Miles of Railway Operated in the State.	Number of Miles of each Railway in each County.	Value per Mile of each Railway.	Total Assessment of each Railway.	Amount of Assessment of each Railway Apportioned to each County.
Santa Barbara		27.00			271,126
Santa Clara		67.10			673,798
Santa Cruz		27.15			272,632
Stanislaus		36.36			365,116
Tulare		107.55			1,079,986
Ventura		54.50			547,273
Carson and Colorado	107.62		\$2,137 14	\$230,000	
Inyo		74.25			158,683
Mono		33.37			71,317
Nevada and California	41.86		2,006 68	84,000	
Lassen		38.60			77,458
Sierra		3.26			65.42
Nevada County Narrow Gauge	22.50		4,444 44	100,000	
Nevada		18.78			83,467
Placer		3.72			16,533
North Pacific Coast	70.25		5,195 72	365,000	
Marin		51.75			268,879
Sonoma		18.50			96,121
Pacific Coast	76.10		5,387 64	410,000	
San Luis Obispo		39.50			212,812
Santa Barbara		36.60			197,188
South Pacific Coast	84.86		15,024 74	1,275,000	
Alameda		31.46			472,679
Santa Clara		27.40			411,678
Santa Cruz		26.00			390,643
Atlantic and Pacific A	242.51		350 50	85,000	
Kern		35.64			12,492
San Bernardino		206.87			72,508
Pullman Palace Car B	746.76		13 89	10,000	
Alameda		83.14			1,113
Butte		45.00			603
Fresno		60.13			805
Merced		36.75			492
Nevada		30.25			405
Placer		112.75			1,510
Sacramento		41.00			549
San Francisco		2.46			33
San Joaquin		56.75			760
Santa Clara		8.50			114
Shasta		82.08			1,099
Sierra		2.15			29
Siskiyou		83.18			1,114
Stanislaus		22.63			303
Sutter		10.00			134
Tehama		40.54			543
Tulare		13.58			182
Yuba		15.87			212
Pullman Palace Car C	615.20		7 56	4,652	
Alameda		6.85			52
Alameda		1.40			10
Contra Costa		23.75			180
Contra Costa		36.10			273
San Joaquin		8.50			64
San Joaquin		22.00			166
Stanislaus		22.63			171
Merced		36.75			278
Fresno		60.13			455
Tulare		13.58			103
Tulare		39.50			299
Kern		137.14			1,037
San Bernardino		206.87			1,564
Total assessment	3,720.87			\$40,488,652	

A For rolling stock used on Colorado Division of the Southern Pacific.

B For rolling stock used on Central Pacific Railroad.

C For rolling stock used by Southern Pacific Co. on Central Pacific, San Pablo and Tulare, Northern Railway, and Southern Pacific Railroads.

SCHEDULE G.

Showing the Amount of Railroad Assessment each County Received in 1889.

NAME OF COUNTY AND ROAD.	Amount Ap- portioned.	Total.
Alameda—		
Central Pacific	\$1,447,346	
Northern Railway	95,393	
Southern Pacific	14,058	
South Pacific Coast	472,679	
Pullman Palace Car	1,175	
		\$2,030,651
Amador—		
Northern Railway	\$72,680	
		72,680
Butte—		
Central Pacific	\$783,384	
Northern California	67,085	
Pullman Palace Car	603	
		851,072
Calaveras—		
Northern Railway	\$89,033	
Southern Pacific	6,628	
		95,661
Colusa—		
Northern Railway	\$723,258	
		723,258
Contra Costa—		
Northern Railway	\$215,769	
Southern Pacific	362,506	
Pullman Palace Car	453	
		578,728
El Dorado—		
Northern Railway	\$277,547	
		277,547
Fresno—		
Central Pacific	\$1,046,775	
Southern Pacific	844,809	
Pullman Palace Car	1,260	
		1,892,844
Inyo—		
Carson and Colorado	\$158,683	
		158,683
Kern—		
Southern Pacific	\$1,541,101	
Atlantic and Pacific	12,492	
Pullman Palace Car	1,037	
		1,554,630
Lassen—		
Nevada and California	\$77,458	
		77,458
Los Angeles—		
California Central	\$803,867	
Southern Pacific	2,177,644	
		2,981,511
Marin—		
North Pacific Coast	\$268,879	
San Francisco and North Pacific	221,095	
		489,974
Merced—		
Central Pacific	\$639,764	
Pullman Palace Car	770	
		640,534
Mono—		
Carson and Colorado	\$71,317	
		71,317
Monterey—		
Southern Pacific	\$1,262,243	
		1,262,243
Napa—		
California Pacific	\$911,111	
Northern Railway	58,417	
		969,528

SCHEDULE G—Continued.

NAME OF COUNTY AND ROAD.	Amount Apportioned.	Total.
Nevada—		
Central Pacific	\$526,608	
Nevada County Narrow Gauge	83,467	
Pullman Palace Car	495	
		\$610,490
Placer—		
Central Pacific	\$1,962,813	
Nevada County Narrow Gauge	16,593	
Pullman Palace Car	1,510	
		1,980,916
Sacramento—		
Central Pacific	\$713,750	
California Pacific	11,111	
Northern Railway	442,894	
Pullman Palace Car	549	
		1,168,294
San Benito—		
Southern Pacific	\$177,296	
		177,296
San Bernardino—		
California Central	\$256,046	
California Southern	521,911	
Southern Pacific	2,625,695	
Atlantic and Pacific	72,508	
Pullman Palace Car	1,564	
		3,577,634
San Diego—		
California Central	\$220,187	
California Southern	578,689	
Southern Pacific	1,506,125	
		2,513,201
San Francisco—		
Central Pacific	\$42,825	
Southern Pacific	73,007	
Pullman Palace Car	33	
		116,765
San Joaquin—		
Central Pacific	\$987,935	
Northern Railway	270,738	
Southern Pacific	523,278	
Pullman Palace Car	690	
		1,782,631
San Luis Obispo—		
Pacific Coast	\$212,812	
Southern Pacific	333,887	
		546,699
San Mateo—		
Southern Pacific	\$252,047	
		252,047
Santa Barbara—		
Pacific Coast	\$197,188	
Southern Pacific	271,126	
		468,314
Santa Clara—		
Central Pacific	\$147,973	
Southern Pacific	678,738	
South Pacific Coast	411,678	
Pullman Palace Car	114	
		1,238,503
Santa Cruz—		
Southern Pacific	\$272,632	
South Pacific Coast	390,943	
		663,575
Shasta—		
Central Pacific	\$1,423,593	
Pullman Palace Car	1,660	
		1,425,253

SCHEDULE G—Continued.

NAME OF COUNTY AND ROAD.	Amount Apportioned.	Total.
Sierra—		
Central Pacific.....	\$37,428	
Nevada and California.....	6,542	
Pullman Palace Car.....	29	\$43,999
Siskiyou—		
Central Pacific.....	\$1,448,042	
Pullman Palace Car.....	1,114	1,449,156
Solano—		
California Pacific.....	\$888,889	
Northern Railway.....	303,894	1,192,783
Sonoma—		
Northern Railway.....	\$277,274	
North Pacific Coast.....	96,121	
San Francisco and North Pacific.....	978,905	1,352,300
Stanislaus—		
Central Pacific.....	\$393,955	
Southern Pacific.....	365,116	
Pullman Palace Car.....	474	759,545
Sutter—		
Central Pacific.....	\$174,085	
Pullman Palace Car.....	134	174,219
Tehama—		
Central Pacific.....	\$705,742	
Northern Railway.....	157,080	
Pullman Palace Car.....	543	863,365
Tulare—		
Central Pacific.....	\$236,408	
Southern Pacific.....	1,079,986	
Pullman Palace Car.....	584	1,316,978
Ventura—		
Southern Pacific.....	\$547,273	547,273
Yolo—		
California Pacific.....	\$688,889	
Northern Railway.....	516,028	1,204,917
Yuba—		
Central Pacific.....	\$276,274	
Northern California.....	57,915	
Pullman Palace Car.....	212	334,401

VALUATIONS FOR 1890.

REPORT OF STATE BOARD OF EQUALIZATION.

SCHEDULE A.

Showing Value of Real Estate and Improvements, after Equalization by the Board, for 1890.

COUNTIES.	Value of Real Estate other than Lots.	Value of City and Town Lots.	Improvements on Real Estate.	Improvements on Lots, etc.	Value of all Real Estate and Lots.	Value of all Improvements.
Alameda.....	\$17,820,081	\$31,147,953.	\$3,121,815	\$17,568,688	\$48,968,034	\$20,030,503
Alpine.....	136,029	1,439	77,950	6,162	137,468	84,112
Amador.....	2,035,640	191,450	692,210	548,050	2,227,110	1,240,290
Butte.....	12,503,245	1,018,845	971,675	1,345,620	13,522,090	2,317,295
Calaveras.....	2,324,490	74,405	672,240	327,000	2,898,895	989,240
Colusa.....	18,865,354	403,970	906,330	774,175	18,989,304	1,680,505
Contra Costa.....	9,227,539	443,964	1,777,123	601,065	9,671,503	2,378,188
Del Norte.....	1,251,765	63,695	213,330	144,275	1,315,450	357,400
El Dorado.....	1,691,005	132,215	648,405	310,425	1,823,280	958,880
Fresno.....	22,046,911	5,616,108	2,054,227	1,996,954	27,663,019	4,051,181
Humboldt.....	10,774,489	1,825,276	1,235,980	1,398,210	12,339,765	2,634,200
Inyo.....	453,158	46,245	275,134	111,385	498,403	386,519
Kern.....	6,702,201	812,496	409,880	436,470	7,514,037	846,330
Lake.....	2,285,472	190,921	550,216	220,268	2,476,393	770,484
Lassen.....	1,182,582	50,037	338,008	115,987	1,232,618	454,005
Los Angeles.....	16,002,495	28,862,500	2,294,220	12,159,080	45,454,995	14,453,300
Marin.....	6,128,073	1,342,167	1,025,515	1,139,750	7,470,240	2,165,265
Mariposa.....	1,200,586	19,891	228,936	66,420	1,220,477	295,366
Mendocino.....	7,260,291	515,268	954,989	656,604	7,775,559	1,611,593
Merced.....	10,036,796	890,690	429,593	428,919	10,927,486	858,422
Modoc.....	1,163,647	47,377	436,638	193,030	1,211,024	629,698
Mono.....	306,725	11,505	214,627	61,390	318,231	275,977
Monterey.....	9,154,096	1,304,900	942,625	806,630	10,458,996	1,749,255
Napa.....	5,773,335	1,224,765	2,290,400	1,795,930	6,998,100	4,086,330
Nevada.....	2,045,890	284,630	991,940	844,410	2,565,520	1,806,350
Orange.....	4,067,241	1,427,774	528,240	940,099	5,495,015	1,468,339
Placer.....	4,513,265	402,044	1,129,685	714,785	4,921,369	1,844,470
Plumas.....	1,265,979	34,930	412,433	142,654	1,900,909	655,067
Sacramento.....	12,504,745	6,548,450	1,496,615	6,652,375	19,053,195	8,148,990
San Benito.....	4,903,005	230,910	467,025	302,450	4,234,515	769,475
San Bernardino.....	9,520,420	3,489,585	1,180,935	2,207,615	12,990,065	4,198,550
San Diego.....	8,092,787	11,907,298	1,866,220	3,754,036	20,000,085	4,450,283
San Francisco.....	2,901,495	162,143,033	139,556	70,177,670	165,044,548	70,317,220
San Joaquin.....	22,085,734	4,284,006	1,466,617	3,700,913	26,369,740	5,167,530
San Luis Obispo.....	8,547,407	1,003,817	688,569	769,392	9,551,224	1,458,551

San Mateo.....	8,627,710	1,128,900	2,108,135	500,575	9,753,010	2,617,710
Santa Barbara.....	8,170,112	2,763,345	4,926,855	1,204,800	10,912,457	2,131,955
Santa Clara.....	24,157,430	11,478,365	4,727,290	5,518,115	35,635,735	10,345,375
Santa Cruz.....	4,025,345	2,630,380	1,025,310	1,134,705	7,155,725	2,100,015
Shasta.....	2,552,771	453,527	633,055	404,887	3,012,268	1,007,912
Sierra.....	746,791	47,390	223,248	210,961	734,151	437,209
Siskiyou.....	2,298,824	157,510	932,492	357,432	2,463,334	1,309,924
Solano.....	12,165,652	718,222	1,403,370	1,484,648	12,963,874	2,887,978
Sonoma.....	15,352,053	2,974,925	3,532,843	2,853,960	18,303,958	6,336,803
Stanislaus.....	10,488,203	701,715	814,040	848,901	11,189,918	1,693,561
Sutter.....	7,162,592	104,771	635,888	155,790	7,267,383	791,678
Tehama.....	7,049,848	677,919	702,415	691,793	7,727,707	1,394,268
Trinity.....	400,367	25,922	238,151	74,811	487,289	312,322
Tulare.....	15,773,559	1,125,491	1,007,329	980,964	16,803,050	1,997,253
Tuolumne.....	1,358,250	91,300	574,165	253,715	1,452,350	827,880
Ventura.....	4,237,948	733,048	325,165	450,139	4,977,696	775,244
Yolo.....	13,601,915	933,940	1,042,300	1,373,640	14,535,875	2,415,910
Yuba.....	3,541,165	522,745	375,065	1,035,675	3,863,850	1,411,710
Totals.....	\$388,440,058	\$235,229,614	\$53,951,420	\$152,993,007	\$683,683,972	\$206,944,427

SCHEDULE B.

Showing Value of all Property, after Equalization by the Board, for 1890.

COUNTIES.	Value of Real Estate and Improvements.	Personal Property except Money and Credits.	Money and Solvent Credits.	Value Preceding Columns.	Railroad Assessment.	Total Value of all Property.
Alameda.....	\$69,658,537	\$6,375,489	\$244,150	\$76,278,176	\$2,016,759	\$78,294,935
Alpine.....	221,580	66,314	4,410	262,304	-----	262,304
Amador.....	3,467,370	640,585	24,670	4,132,575	62,297	4,194,872
Butte.....	15,839,355	2,241,968	310,489	18,391,862	851,072	19,242,934
Calaveras.....	3,398,135	808,120	47,620	4,253,875	82,816	4,336,691
Colusa.....	20,639,809	2,708,555	293,585	23,672,049	619,935	24,291,984
Contra Costa.....	12,049,691	2,869,801	76,934	14,996,426	541,063	15,537,489
Del Norte.....	1,673,065	177,169	38,697	1,888,931	-----	1,888,931
El Dorado.....	2,782,110	728,855	49,885	3,600,850	237,897	3,798,747
Fresno.....	31,714,200	3,633,772	191,683	35,539,655	1,876,902	37,416,557
Humboldt.....	15,233,965	2,484,254	311,033	18,029,252	-----	18,029,252
Inyo.....	884,922	468,931	4,500	1,358,353	158,683	1,517,036
Kern.....	8,361,047	1,978,838	49,289	10,389,154	1,525,549	11,914,703
Lake.....	3,246,877	485,168	43,950	3,775,995	-----	3,775,995
Lassen.....	1,686,623	739,403	78,293	2,504,319	77,498	2,581,777
Los Angeles.....	59,908,295	6,740,140	473,175	67,121,610	2,353,415	69,475,025
Marin.....	9,635,505	1,170,428	47,416	10,853,349	563,063	11,416,412
Mariposa.....	1,515,833	366,184	9,450	1,891,467	-----	1,891,467
Mendocino.....	9,337,152	1,767,205	150,673	11,305,030	257,222	11,562,252
Mered.....	1,785,908	1,518,225	64,788	3,368,921	849,598	4,218,519
Modoc.....	1,840,692	1,148,811	92,612	3,082,115	-----	3,082,115
Mono.....	594,208	241,996	7,227	843,431	71,317	914,748
Monterey.....	12,208,251	2,088,520	108,980	14,405,751	1,282,069	14,687,820
Napa.....	11,084,430	2,695,774	146,440	13,926,644	961,183	14,887,827
Nevada.....	4,156,870	985,700	166,575	5,309,145	602,133	5,911,278
Orange.....	6,963,354	1,131,615	107,735	8,202,704	562,736	8,765,440
Placer.....	6,766,779	1,229,360	136,265	8,130,404	1,979,203	10,169,607
Plumas.....	1,856,976	515,613	21,620	2,393,209	-----	2,393,209
Sacramento.....	27,202,185	4,549,955	454,629	32,206,769	1,105,683	33,311,802
San Benito.....	5,003,980	889,081	89,249	5,982,320	173,891	6,156,211
San Bernardino.....	17,188,555	1,588,165	254,575	19,031,266	3,459,145	22,490,440
San Diego.....	24,450,371	3,077,028	176,121	27,703,520	2,414,383	30,118,563
San Francisco.....	235,361,708	48,696,836	17,385,536	301,444,140	115,370	301,559,510
San Joaquin.....	31,537,270	4,587,181	371,656	36,496,107	1,734,381	38,230,488

San Luis Obispo	11,009,775	1,924,254	148,904	13,082,933	524,826	13,607,759
San Mateo	12,374,320	978,525	284,240	13,637,085	247,291	13,884,376
Santa Barbara	13,074,112	1,668,828	49,689	14,792,629	448,770	15,241,399
Santa Clara	45,881,170	4,613,938	596,700	51,091,808	1,220,849	52,312,657
Santa Cruz	9,315,740	1,284,080	43,245	10,643,065	658,131	11,301,196
Shasta	4,020,240	1,093,635	62,848	5,086,725	1,429,992	6,516,715
Sierra	1,231,360	268,360	30,930	1,530,650	43,999	1,574,649
Siskiyou	3,763,258	1,281,560	269,536	5,307,354	1,449,156	6,756,510
Solano	15,851,852	2,236,384	143,296	18,231,502	1,149,370	19,380,872
Sonoma	24,763,761	3,926,061	144,120	28,835,942	1,452,378	30,288,320
Stanislaus	12,853,479	2,203,266	148,364	15,205,109	754,429	15,959,538
Sutter	8,035,041	1,109,202	103,527	9,271,770	174,219	9,445,989
Tehama	9,121,975	1,756,371	69,465	10,947,811	840,925	11,788,736
Trinity	800,281	272,272	64,002	1,136,555	-----	1,136,555
Tulare	18,896,343	2,646,009	200,475	21,742,827	1,296,598	23,039,425
Tuolumne	2,280,430	570,250	39,860	2,890,540	-----	2,890,540
Ventura	5,752,840	1,108,751	189,632	7,051,253	636,946	7,588,199
Yolo	16,951,824	2,219,683	427,142	19,598,649	1,131,199	20,729,848
Yuba	5,275,590	1,206,645	128,105	6,670,340	334,401	7,004,741
Totals	\$890,614,099	\$143,753,183	\$25,226,970	\$1,059,574,252	\$40,198,652	\$1,099,772,904

SCHEDULE C.

Showing Assessment and Apportionment of Railways for 1890.

Name of each Railway Assessed, and Name of the County to which Assessment is Apportioned.	Number of Miles of Railway Operated in the State.	Number of Miles of each Railway in each County.	Value per Mile of each Railway.	Total Assessment of each Railway.	Amount of Assessment of each Railway Apportioned to each County.
California Pacific Railway	112.50		\$22,222 22	\$2,500,000	
Napa		41.00			\$911,111
Sacramento		.50			11,111
Solano		40.00			888,889
Yolo		31.00			688,889
Central Pacific	746.76		17,408 53	13,000,000	
Alameda		83.14			1,447,346
Butte		45.00			783,384
Fresno		60.13			1,046,775
Merced		36.75			639,764
Nevada		30.25			526,608
Placer		112.75			1,962,813
Sacramento		41.00			713,750
San Francisco		2.46			42,825
San Joaquin		56.75			987,935
Santa Clara		8.50			147,973
Shasta		82.08			1,428,893
Sierra		2.15			37,428
Siskiyou		83.18			1,448,042
Stanislaus		22.63			393,955
Sutter		10.00			174,085
Tehama		40.54			705,742
Tulare		13.58			236,408
Yuba		15.87			276,274
Northern California Railway	25.90		4,826 25	125,000	
Butte		13.90			67,085
Yuba		12.00			57,915
Northern Railway	385.25		7,787 15	3,000,000	
Alameda		10.50			81,766
Amador		8.50			62,297
Calaveras		9.30			76,314
Colusa		79.61			619,935
Contra Costa		23.75			184,945
El Dorado		30.55			237,897
Napa		6.43			50,072
Sacramento		48.75			379,623
San Joaquin		29.80			232,057
Solano		33.45			260,481
Sonoma		30.52			237,663
Tehama		17.29			134,640
Yolo		56.80			442,310
San Francisco and N. Pacific	164.28		10,043 82	1,650,000	
Marin		29.29			294,184
Mendocino		25.61			257,222
Sonoma		109.38			1,098,594
Southern California	474.80		5,054 75	2,400,000	
Los Angeles		83.60			422,578
Orange		63.00			318,450
San Bernardino		160.05			809,014
San Diego		168.15			849,958
Southern Pacific	1,522.50		9,852 21	15,000,000	
Alameda		1.40			13,793
Calaveras		.66			6,502
Contra Costa		36.10			355,665
Fresno		84.13			828,867
Kern		153.47			1,512,020
Los Angeles		195.98			1,930,837
Merced		21.22			209,064
Monterey		130.13			1,282,069
Orange		23.78			234,286
San Benito		17.65			173,891
San Bernardino		261.47			2,576,059
San Diego		158.85			1,565,025
San Francisco		7.36			72,512

SCHEDULE C—Continued.

Name of each Railway Assessed, and Name of the County to which Assessment is Appor- tioned.	Number of Miles of Railway Operated in the State.	Number of Miles of each Rail- way in each County.	Value per Mile of each Railway.	Total As- sessment of each Railway.	Amount of Assessment of each Rail- way Appor- tioned to each County.
San Joaquin		52.11			\$513,399
San Luis Obispo		33.25			327,586
San Mateo		25.10			247,291
Santa Barbara		27.00			266,010
Santa Clara		67.10			661,084
Santa Cruz		27.15			267,488
Stanislaus		36.54			360,000
Tulare		107.55			1,059,606
Ventura		54.50			536,946
Carson and Colorado	107.62		\$2,137 14	\$230,000	
Inyo		74.25			158,683
Mono		33.37			71,317
Nevada and California	41.86		2,006 68	84,000	
Lassen		38.60			77,468
Sierra		3.26			6,542
Nevada County Narrow Gauge.	22.50		4,000 00	90,000	
Nevada		18.78			75,120
Placer		3.72			14,880
North Pacific Coast	70.25		5,195 72	365,000	
Marin		51.75			268,879
Sonoma		18.50			96,121
Pacific Coast Railway	76.10		4,993 42	380,000	
San Luis Obispo		39.50			197,240
Santa Barbara		36.60			182,760
South Pacific Coast Railway	84.86		15,024 74	1,275,000	
Alameda		31.46			472,679
Santa Clara		27.40			411,678
Santa Cruz		26.00			390,643
Atlantic and Pacific	242.51		350 50	85,000	
Kern		35.64			12,492
San Bernardino		206.87			72,508
Pullman Palace Car	746.76		13 39	10,000	
Alameda		83.14			1,113
Butte		45.00			603
Fresno		60.13			805
Merced		36.75			492
Nevada		30.25			405
Placer		112.75			1,510
Sacramento		41.00			549
San Francisco		2.46			33
San Joaquin		56.75			760
Santa Clara		8.50			114
Shasta		82.08			1,099
Sierra		2.15			29
Siskiyou		83.18			1,114
Stanislaus		22.63			303
Sutter		10.00			154
Tehama		40.54			543
Tulare		13.58			182
Yuba		15.87			212
Pullman Palace Car	615.20		7 56	4,652	
Alameda		6.85			52
Alameda		1.40			10
Contra Costa		23.75			180
Contra Costa		36.10			273
San Joaquin		8.50			64
San Joaquin		22.00			166
Stanislaus		22.63			171
Merced		36.75			278
Fresno		60.13			455
Tulare		13.58			103
Tulare		39.50			299
Kern		137.14			1,037
San Bernardino		206.87			1,564
Totals	4,077.69			\$40,198,652	

SCHEDULE D.

Showing Apportionment of Railways to Counties for 1890.

NAME OF COUNTY AND ROAD.	Amount Apportioned.	Total.
Alameda—		
Central Pacific.....	\$1,447,346	
Northern Railway.....	81,766	
Southern Pacific.....	13,793	
South Pacific Coast.....	472,679	
Pullman Palace.....	1,175	
		\$2,016,759
Amador—		
Northern Railway.....	\$62,297	
		62,297
Butte—		
Central Pacific.....	\$783,384	
Northern California.....	67,085	
Pullman Palace.....	603	
		851,072
Calaveras—		
Northern Railway.....	\$76,314	
Southern Pacific.....	6,502	
		82,816
Colusa—		
Northern Railway.....	\$619,935	
		619,935
Contra Costa—		
Northern Railway.....	\$184,945	
Southern Pacific.....	355,665	
Pullman Palace.....	453	
		541,063
El Dorado—		
Northern Railway.....	\$237,897	
		237,897
Fresno—		
Central Pacific.....	\$1,046,775	
Southern Pacific.....	828,867	
Pullman Palace.....	1,260	
		1,876,902
Inyo—		
Carson and Colorado.....	\$158,683	
		158,683
Kern—		
Southern Pacific.....	\$1,512,020	
Atlantic and Pacific.....	12,492	
Pullman Palace.....	1,037	
		1,525,549
Lassen—		
Nevada and California.....	\$77,458	
		77,458
Los Angeles—		
Southern Pacific.....	\$1,930,837	
Southern California.....	422,578	
		2,353,415
Marin—		
North Pacific Coast.....	\$268,879	
San Francisco and North Pacific.....	294,184	
		563,063
Mendocino—		
San Francisco and North Pacific.....	\$257,222	
		257,222
Merced—		
Central Pacific.....	\$639,764	
Southern Pacific.....	209,064	
Pullman Palace.....	770	
		849,598
Mono—		
Carson and Colorado.....	\$71,317	
		71,317

SCHEDULE D—Continued.

NAME OF COUNTY AND ROAD.	Amount Apportioned.	Total.
Monterey—		
Southern Pacific	\$1,282,069	\$1,282,069
Napa—		
California Pacific	\$911,111	961,183
Northern Railway	50,072	
Nevada—		
Central Pacific	\$526,608	602,133
Nevada County Narrow Gauge	75,120	
Pullman Palace	405	
Orange—		
Southern Pacific	\$234,286	552,736
Southern California	318,450	
Placer—		
Central Pacific	\$1,962,813	1,979,203
Nevada County Narrow Gauge	14,880	
Pullman Palace	1,510	
Sacramento—		
Northern Railway	\$379,623	1,105,033
Central Pacific	713,750	
California Pacific	11,111	
Pullman Palace	549	
San Benito—		
Southern Pacific	\$173,891	173,891
San Bernardino—		
Southern California	\$809,014	3,459,145
Southern Pacific	2,576,059	
Atlantic and Pacific	72,508	
Pullman Palace	1,564	
San Diego—		
Southern Pacific	\$1,565,025	2,414,983
Southern California	849,958	
San Francisco—		
Central Pacific	\$42,825	115,370
Southern Pacific	72,512	
Pullman Palace	33	
San Joaquin—		
Central Pacific	\$987,935	1,734,381
Southern Pacific	513,399	
Northern Railway	232,057	
Pullman Palace	990	
San Luis Obispo—		
Southern Pacific	\$327,586	524,826
Pacific Coast Railway	197,240	
San Mateo—		
Southern Pacific	\$247,291	247,291
Santa Barbara—		
Southern Pacific	\$266,010	448,770
Pacific Coast Railway	182,760	
Santa Clara—		
Central Pacific	\$147,973	1,220,849
Southern Pacific	661,084	
South Pacific Coast	411,678	
Pullman Palace	114	

SCHEDULE D—Continued.

NAME OF COUNTY AND ROAD.	Amount Apportioned.	Total.
Santa Cruz—		
Southern Pacific	\$267,488	
South Pacific Coast	390,643	\$658,131
Shasta—		
Central Pacific	\$1,428,893	
Pullman Palace	1,099	1,429,992
Sierra—		
Central Pacific	\$37,428	
Nevada and California	6,542	
Pullman Palace	29	43,999
Siskiyou—		
Central Pacific	\$1,448,042	
Pullman Palace	1,114	1,449,156
Solano—		
California Pacific	\$888,889	
Northern Railway	260,481	1,149,370
Sonoma—		
North Pacific Coast	\$96,121	
San Francisco and North Pacific	1,098,594	
Northern Railway	237,663	1,432,378
Stanislaus—		
Central Pacific	\$393,955	
Southern Pacific	360,000	
Pullman Palace	474	754,429
Sutter—		
Central Pacific	\$174,085	
Pullman Palace	134	174,219
Tehama—		
Central Pacific	\$705,742	
Northern Railway	134,640	
Pullman Palace	543	840,925
Tulare—		
Central Pacific	\$236,408	
Southern Pacific	1,059,606	
Pullman Palace	584	1,296,598
Ventura—		
Southern Pacific	\$536,946	536,946
Yolo—		
California Pacific	\$688,889	
Northern Railway	442,310	1,131,199
Yuba—		
Central Pacific	\$276,274	
Northern California	57,915	
Pullman Palace	212	334,401

ASSESSMENT OF PERSONAL PROPERTY

FOR 1889 AND 1890.

REPORT OF STATE BOARD OF EQUALIZATION.

SCHEDULE A.

Showing kinds of Personal Property Assessed and the Assessed Value for 1889.

COUNTIES.	State, County, or Municipal Bonds.	Jewelry or Plate—Value.	WATCHES.		Money.	Solvent Credits.
			Number.	Value.		
Alameda		\$46,210	8,060	\$80,600	\$15,250	\$220,989
Alpine		210	22	440	2,000	2,761
Amador		200			4,000	28,915
Butte		4,870	845	20,790	109,427	329,468
Calaveras	\$2,600	995	532	9,745	22,500	24,175
Colusa		4,260	688	13,765	183,655	388,310
Contra Costa		1,645	278	6,950	42,320	66,101
Del Norte	580	632	174	3,179	25,415	23,407
El Dorado		1,165	406	9,865	50,570	20,585
Fresno	740	10,706	1,453	28,129	40,414	187,021
Humboldt				20,457	294,383	436,573
Inyo	4,000	120	153	3,206	3,000	6,215
Kern		1,745		6,930		
Lake		560	316	5,240	47,958	17,400
Lassen		415	167	2,990	3,960	67,180
Los Angeles	25	38,290	5,901	95,815	146,750	441,825
Marin		5,450	109	4,825	10,200	29,267
Mariposa			143	2,210	2,510	8,360
Mendocino		1,130	510	10,493	64,139	135,997
Merced		1,255	530	7,965	22,785	32,870
Modoc		897	309	5,293	20,602	138,028
Mono		660	59	1,815	5,550	3,331
Monterey		2,800	2,513	29,820	31,550	56,780
Napa		12,110	1,156	21,270	162,235	444,170
Nevada	700	1,285	261	10,295	102,435	145,895
Placer		4,945	682	21,118	84,376	180,806
Plumas	1,250	425	129	4,443	22,437	15,130
Sacramento		11,100	1,450	41,325	157,435	356,980
San Benito		600	143	3,325	21,305	51,440
San Bernardino	10,060	9,045	1,143	27,559	51,730	172,887
San Diego		8,329	1,773	27,846	119,911	151,613
San Francisco	111,120	574,083	8,725	196,020	6,428,370	9,094,752
San Joaquin		10,500	1,842	38,682	153,743	301,481
San Luis Obispo		2,545	824	11,173	80,395	16,820
San Mateo		6,870	150	5,310	80,000	238,960
Santa Barbara		4,460		12,945	35,470	50,510
Santa Clara	11,850	16,015	2,994	59,890	389,290	255,350
Santa Cruz			377	7,905	76,245	18,360
Shasta	22,100	2,505	514	9,673	40,896	37,827
Sierra		320	69	3,150	12,529	31,650
Siskiyou		1,090	197	6,784	102,509	143,275
Solano			1,116	13,392	80,121	97,214
Sonoma	2,100	20,830	2,340	29,780	193,415	343,488
Stanislaus		3,320	923	24,321	51,720	132,633
Sutter	650		486	8,338	38,635	94,850
Tehama		910	392	10,675	50,000	59,600
Trinity	4,500	1,035	150	4,832	15,996	39,169
Tulare		4,870	877	14,461	81,822	102,256
Tuolumne		1,200	210	8,400	55,020	19,500
Ventura			569	10,349	37,146	145,658
Yolo		2,135	470	22,525	47,280	366,320
Yuba		1,375	111	5,360	72,460	73,755
Totals	\$172,275	\$826,117	52,672	\$821,109	\$9,993,864	\$15,847,907

SCHEDULE A—Continued.

COUNTIES.	Casks and Tanks—Value.	HORSES—THOROUGH-BRED.		HORSES—GRADED.	
		Number.	Value.	Number.	Value.
Alameda.....	\$218	103	\$30,900	500	\$50,000
Alpine.....				130	4,680
Amador.....		14	2,750	925	31,725
Butte.....		7	2,310	2,018	161,440
Calaveras.....	1,500			2,581	99,425
Colusa.....		10	3,200	6,066	260,620
Contra Costa.....		35	17,500	1,502	150,200
Del Norte.....					
El Dorado.....	5,085				
Fresno.....		21	9,650		
Humboldt.....		9	4,900		
Inyo.....	1,300	65	12,240		
Kern.....		34	10,200	1,213	95,827
Lake.....	485	3	2,800		
Lassen.....				130	15,550
Los Angeles.....	40,335	203	85,875		
Marin.....		5	1,750	985	41,720
Mariposa.....		19	2,200	1,196	31,428
Mendocino.....	300	2	900	4,519	214,178
Merced.....					
Modoc.....		12	4,250	5,782	127,273
Mono.....				16	2,450
Monterey.....		8	7,810	33	13,535
Napa.....	125,250	32	7,700		
Nevada.....		6	1,010		
Placer.....	2,990	21	6,600		
Plumas.....				112	13,700
Sacramento.....	8,200	155	42,625	485	77,600
San Benito.....	1,175	10	5,000	40	5,700
San Bernardino.....	1,540	7	8,500	3,414	147,320
San Diego.....		44	9,195	3,047	119,412
San Francisco.....					
San Joaquin.....		48	24,000		
San Luis Obispo.....		83	16,035	5,706	181,553
San Mateo.....	870	6	3,750	720	76,305
Santa Barbara.....		58	16,240	5,684	147,784
Santa Clara.....	92,995	60	28,375		
Santa Cruz.....	3,220	20	5,600		
Shasta.....				16	2,550
Sierra.....		10	1,750	917	26,515
Siskiyou.....		8	2,500	2,346	134,657
Solano.....	10,000	30	12,000	1,788	89,400
Sonoma.....	93,965	92	59,800	526	68,380
Stanislaus.....		31	10,709	5,520	290,352
Sutter.....		28	9,590	1,234	111,400
Tehama.....	34,973	23	4,700	46	10,913
Trinity.....		4	1,200	101	8,585
Tulare.....		53	19,150		
Tuolumne.....		5	1,250	1,300	52,000
Ventura.....	9,105	10	3,400		
Yolo.....		33	28,950		
Yuba.....		1	1,000	20	3,375
Totals.....	\$433,506	1,433	\$509,864	60,618	\$2,867,552

SCHEDULE A—Continued.

COUNTIES.	HORSES—AMERICAN.		HORSES—COMMON.		COLTS.	
	Number.	Value.	Number.	Value.	Number.	Value.
Alameda	9,260	\$463,000	210	\$4,200	820	\$20,500
Alpine					90	1,800
Amador	1,953	92,565			839	19,895
Butte	3,866	173,970			1,943	54,404
Calaveras	184	18,695			975	22,320
Colusa	1,170	106,611			2,684	69,980
Contra Costa	4,780	240,243	531	9,558	3,640	94,640
Del Norte	235	16,380	296	9,470	108	3,415
El Dorado	2,517	110,435			663	15,830
Fresno	2,334	157,851	9,336	369,178	3,417	75,124
Humboldt	1,564	156,400	3,305	165,250	1,312	26,855
Inyo	1,295	52,113	2,464	59,343	948	12,169
Kern	4,072	138,454			2,058	49,505
Lake	445	42,275	2,050	90,875	856	23,435
Lassen	672	50,400	6,743	179,095	1,917	23,507
Los Angeles	22,840	997,985			4,699	113,340
Marin	842	71,660			487	19,770
Mariposa	304	13,735			649	10,135
Mendocino	559	61,675			1,359	36,212
Merced	1,284	90,795	4,242	167,538	1,981	44,643
Modoc	4,183	174,875			2,188	29,567
Mono	181	11,635	1,203	30,003	519	6,518
Monterey	3,743	225,515	5,592	214,730	2,938	67,205
Napa	3,150	173,250	1,835	57,344		
Nevada	1,046	71,970	1,050	37,230	761	15,990
Placer	1,165	95,370	2,254	84,683	1,175	32,145
Plumas	1,434	73,970			674	21,980
Sacramento	4,921	345,145	225	5,625	2,860	74,360
San Benito	2,265	136,940	1,967	59,870	2,964	82,335
San Bernardino	841	83,920	529	8,995	1,303	24,823
San Diego	1,814	112,336	3,111	79,416	1,930	31,820
San Francisco	14,564	930,900				
San Joaquin	4,523	316,610	9,245	305,085	4,914	122,850
San Luis Obispo	2,100	110,406			3,271	70,638
San Mateo	1,737	89,990			799	22,695
Santa Barbara	2,408	132,440			1,382	24,876
Santa Clara	7,750	620,000	2,664	79,920	3,193	107,420
Santa Cruz	1,528	96,285	2,146	75,720	815	18,955
Shasta	1,384	84,165	3,139	91,795	1,311	29,238
Sierra	299	15,900			512	7,260
Siskiyou	5,611	135,385			1,719	27,491
Solano	2,516	226,440	634	15,850	2,531	87,585
Sonoma	7,140	449,820			1,746	52,580
Stanislaus	1,221	113,553			2,960	89,392
Sutter	1,875	98,644	1,379	38,720	2,165	66,501
Tehama	2,161	149,270	1,866	63,770	1,259	32,733
Trinity	1,032	33,024			90	1,800
Tulare	1,918	149,975	10,942	484,965	7,937	154,229
Tuolumne	550	34,750			400	7,200
Ventura	1,823	138,940	2,394	120,185	2,102	66,395
Yolo	5,199	385,960			2,252	71,960
Yuba	433	47,530	2,757	124,265	1,134	26,905
Totals	152,691	\$8,920,155	84,149	\$3,032,678	91,249	\$2,212,725

SCHEDULE A—Continued.

COUNTIES.	CATTLE—BEEF.		CATTLE—STOCK.		CALVES.	
	Number.	Value.	Number.	Value.	Number.	Value.
Alameda	975	\$14,375	6,840	\$102,600	1,628	\$8,140
Alpine	20	400	400	3,200	400	2,000
Amador	43	870	6,436	86,540		
Butte	342	7,866	9,070	136,050	2,538	20,304
Calaveras	104	2,080	5,795	69,540	3,486	17,430
Colusa			7,146	85,752	2,371	13,510
Contra Costa			6,512	97,680	3,942	35,478
Del Norte			1,197	14,196	701	4,222
El Dorado			2,854	49,945	3,491	34,910
Fresno	441	9,641	39,438	500,988	4,711	31,564
Humboldt	947	23,675	15,669	244,632	9,656	48,280
Inyo	160	2,589	9,000	90,000	4,127	20,635
Kern	588	11,760	65,114	781,368	8,375	41,875
Lake			2,938	33,783	1,792	10,966
Lassen	221	4,420	18,044	180,440	8,143	40,715
Los Angeles	721	12,355	17,100	197,565	4,531	37,440
Marin			5,028	75,872	3,250	25,186
Mariposa	183	3,359	5,952	83,328	1,043	5,215
Mendocino	294	5,180	8,595	131,884	3,545	23,462
Merced	211	5,275	18,491	257,948	6,752	41,411
Modoc	320	6,400	30,249	307,667	12,813	65,984
Mono	130	2,813	5,340	53,316	913	4,606
Monterey			10,925	163,875	6,450	25,800
Napa	150	4,500	5,562	68,525	2,500	16,640
Nevada			3,305	36,860	1,256	9,390
Placer	131	2,600	2,518	33,133	1,091	14,065
Plumas	477	9,540	3,357	43,651	3,295	23,098
Sacramento	710	15,620	6,130	98,080	4,710	35,325
San Benito			17,531	220,495	6,428	38,155
San Bernardino	557	12,811	7,694	76,940	2,313	11,565
San Diego	132	2,614	23,430	337,337	4,126	26,054
San Francisco	210	8,980				
San Joaquin	24	480	19,004	190,940	3,024	15,120
San Luis Obispo	362	6,496	40,161	426,351	7,961	23,883
San Mateo	203	3,025	3,761	54,465	2,850	18,180
Santa Barbara			19,482	272,748	1,684	6,736
Santa Clara	270	5,940	12,955	155,460	5,340	37,380
Santa Cruz			3,172	41,235	890	4,515
Shasta	125	2,575	8,625	104,619	2,717	17,047
Sierra	25	500	1,199	13,965	762	4,535
Siskiyou	437	10,470	19,751	292,720	7,864	63,603
Solano	4,100	82,000	4,830	65,205	6,550	52,400
Sonoma	380	7,600	3,712	51,988	3,856	19,280
Stanislaus	80	1,800	8,123	122,345	3,250	31,653
Sutter	60	1,112	4,294	52,448	2,133	15,270
Tehama	970	19,395	4,780	71,697	2,396	11,980
Trinity	25	500	4,135	62,025	1,205	12,050
Tulare	285	5,690	29,273	299,456	8,022	41,969
Tuolumne			2,000	30,000	400	2,000
Ventura			9,056	116,091	942	8,215
Yolo	253	6,495	4,670	66,795	3,510	27,900
Yuba	62	1,650	4,203	55,515	1,924	10,355
Totals	15,730	\$325,451	574,936	\$7,209,258	188,626	\$1,157,556

REPORT OF STATE BOARD OF EQUALIZATION.

SCHEDULE A—Continued.

COUNTIES.	COWS—THOROUGHbred.		COWS—AMERICAN.		COWS—GRADED.	
	Number.	Value.	Number.	Value.	Number.	Value.
Alameda	190	\$9,500	7,250	\$145,000	895	\$35,800
Alpine					160	2,400
Amador			2,800	61,350		
Butte	19	1,330	2,251	60,777		
Calaveras	16	1,260			3,013	60,260
Colusa	32	2,600	2,735	58,997		
Contra Costa	56	4,200			5,916	118,320
Del Norte						
El Dorado			3,659	76,750		
Fresno			85	5,215	4,649	121,140
Humboldt	28	1,680	11,774	235,862		
Inyo	12	650	8	410		
Kern	22	1,980	2,832	56,640		
Lake			1,902	38,760		
Lassen	21	725	1,524	30,480		
Los Angeles					11,220	298,440
Marin	8	400	24,982	500,756		
Mariposa	3	150	287	8,010		
Mendocino	6	300			4,504	109,330
Merced	26	1,300	1,780	44,500		
Modoc	8	475	1,430	28,272		
Mono	5	250				
Monterey			2,130	42,600	5,937	106,865
Napa	75	6,000	4,585	91,700		
Nevada	31	2,835	2,472	58,140		
Placer	14	670	3,055	65,529		
Plumas	19	825	3,448	68,960		
Sacramento	130	7,800	7,510	165,220	115	3,900
San Benito	15	1,500	3,732	62,180		
San Bernardino	35	3,500			3,411	86,130
San Diego	51	2,630	816	27,090	1,271	31,286
San Francisco			5,807	160,587		
San Joaquin	40	400	5,046	126,150		
San Luis Obispo					20,847	416,940
San Mateo	115	6,190			10,016	217,180
Santa Barbara	287	14,350			6,143	153,575
Santa Clara	135	9,420	8,725	218,125		
Santa Cruz					4,984	99,570
Shasta	4	300	3,203	64,092	6	195
Sierra			966	21,975		
Siskiyou	51	4,975	3,144	78,220		
Solano	85	4,250	5,731	126,082		
Sonoma	78	7,020	16,985	339,700	527	15,810
Stanislaus	7	350	2,382	56,691		
Sutter	15	1,385	2,009	48,750		
Tehama	120	13,915	1,761	44,025		
Trinity					18	900
Tulare	90	4,990			6,481	140,321
Tuolumne	1	100			890	22,250
Ventura			1,483	36,402		
Yolo	20	1,000	4,553	103,215		
Yuba	1	60	60	1,800	2,839	53,740
Totals	1,861	\$125,365	154,882	\$3,359,012	93,842	\$2,094,352

SCHEDULE A—Continued.

COUNTIES.	COWS—COMMON.		OXEN.		HOGS.	
	Number.	Value.	Number.	Value.	Number.	Value.
Alameda	1,560	\$15,600	8	\$160	1,620	\$8,100
Alpine					60	180
Amador			47	1,760	2,524	5,090
Butte			144	7,200	8,529	25,587
Calaveras			35	1,050		5,465
Colusa					17,534	43,013
Contra Costa					4,610	18,440
Del Norte	3,182	64,250	72	2,220	794	1,876
El Dorado			70	2,330	1,582	5,295
Fresno			131	5,720	6,972	17,826
Humboldt			315	15,510	4,919	9,488
Inyo	803	16,060	26	850	1,037	2,508
Kern						6,864
Lake			60	1,060	4,550	10,763
Lassen			54	1,500	1,407	2,814
Los Angeles			3	45	5,770	19,330
Marin			22	1,100	7,623	27,442
Mariposa			12	900	1,505	4,515
Mendocino			391	14,145	6,723	16,746
Merced					4,721	11,922
Modoc			49	10,915	2,866	5,862
Mono	561	11,230	5	175	188	668
Monterey					2,094	5,235
Napa					4,125	12,375
Nevada			32	1,125	803	2,575
Placer			152	4,855	1,517	6,183
Plumas			57	2,160	815	3,236
Sacramento			140	4,200	15,160	45,480
San Benito			128	2,315	2,659	5,140
San Bernardino			67	1,775	1,937	9,685
San Diego	1,819	36,635	39	850	2,487	3,699
San Francisco					2,153	14,970
San Joaquin					14,521	29,042
San Luis Obispo			8	160	5,608	16,900
San Mateo			44	1,160	1,760	6,108
Santa Barbara					2,128	6,384
Santa Clara					4,850	14,550
Santa Cruz			129	3,875	1,684	6,360
Shasta			92	2,850	7,225	18,452
Sierra			131	3,743	84	430
Siskiyou			257	7,155	4,979	14,369
Solano					6,950	13,900
Sonoma			128	5,120	16,310	52,192
Stanislaus					7,279	21,837
Sutter			17	425	7,786	17,026
Tehama					7,924	23,773
Trinity	405	9,625	49	1,570	55	660
Tulare			59	1,755	10,473	36,909
Tuolumne			50	1,500	2,000	5,000
Ventura					4,547	13,643
Yolo					10,256	30,885
Yuba			177	5,315	3,070	7,340
Totals	8,330	\$153,400	3,200	\$118,548	239,182	\$694,132

REPORT OF STATE BOARD OF EQUALIZATION.

SCHEDULE A—Continued.

COUNTIES.	MULES.		JACKS AND JENNIES.		LAMBS.	
	Number.	Value.	Number.	Value.	Number.	Value.
Alameda	250	\$17,500	6	\$60	100	\$200
Alpine	15	350			240	120
Amador	148	6,165	1	200		
Butte	2,289	136,340	20	5,820	6,028	1,507
Calaveras	90	4,790	45	745	8,200	2,050
Colusa	4,290	306,670	88	11,185	6,410	3,205
Contra Costa	290	17,400			162	162
Del Norte	38	2,190				
El Dorado	57	2,815	13	190		
Fresno	2,173	123,094	47	6,460	83,031	42,457
Humboldt	703	37,735	3	900	2,000	850
Inyo	373	11,434	35	1,795		
Kern	965	50,185		8,973	56,004	28,002
Lake	149	8,910	10	3,100		
Lassen	207	7,915	14	1,390		
Los Angeles	1,781	86,935	74	1,540	8,743	4,910
Marin	22	1,050			112	125
Mariposa	128	3,456	38	544	8,350	4,175
Mendocino	340	14,530	20	2,300	13,195	6,597
Merced	2,004	129,385	42	3,860	35,676	17,838
Modoc	470	15,311	49	10,915		
Mono	49	1,550	2	400		
Monterey	109	5,450	10	275		
Napa	485	36,375	15	2,625	3,862	1,931
Nevada	74	3,460	6	355		
Placer	208	12,190	3	45	8,307	4,164
Plumas	26	970	5	75		
Sacramento	352	29,920	19	3,800	9,640	4,820
San Benito	129	4,385	32	230	6,130	3,015
San Bernardino	304	15,200	43	344		
San Diego	593	27,730	39	679	6,551	2,630
San Francisco	142	5,785				
San Joaquin	2,754	198,288	56	11,480	7,924	3,962
San Luis Obispo	320	10,990	13	855	2,915	1,457
San Mateo	56	2,720			100	100
Santa Barbara	736	35,328	21	420		
Santa Clara	203	11,170	10	200	45	45
Santa Cruz	102	3,995	18	180		
Shasta	361	16,144	17	2,495	9	4
Sierra	77	3,885				
Siskiyou	1,076	40,240	60	8,620		
Solano	1,710	145,350			2,000	500
Sonoma	415	19,920	37	703	11,300	5,650
Stanislaus	3,985	271,047	75	13,770	16,228	8,114
Sutter	1,260	98,900			300	75
Tehama	1,381	108,680	25	3,470	12,354	6,177
Trinity	285	11,400	2	500	210	105
Tulare	1,377	81,551	60	6,985		
Tuolumne	73	3,650	45	450	1,200	600
Ventura	270	13,600			1,100	825
Yolo	2,272	221,340	24	12,450		
Yuba	231	15,250	24	1,350		
Totals	38,197	\$2,440,633	1,226	\$132,733	318,426	\$156,372

SCHEDULE A--Continued.

COUNTIES.	SHEEP—IMPORTED OR FINE.		SHEEP—GRADED.		SHEEP—COMMON.	
	Number.	Value.	Number.	Value.	Number.	Value.
Alameda	300	\$1,200			4,200	\$4,200
Alpine			380	\$570		
Amador					4,495	6,735
Butte			2,500	3,500	32,816	41,020
Calaveras					21,184	31,775
Colusa			400	1,200	79,150	118,725
Contra Costa					6,215	10,878
Del Norte					700	1,051
El Dorado					8,715	13,065
Fresno	33	165	17,037	34,304	235,249	358,494
Humboldt			624	1,700	139,357	174,196
Inyo					2,825	3,517
Kern	1,312	6,560			292,004	464,287
Lake					20,146	30,264
Lassen					14,618	21,927
Los Angeles			152,282	213,195		
Marin					213	365
Mariposa					23,932	35,898
Mendocino			264	1,210	158,352	237,528
Merced					92,495	134,119
Modoc					20,114	29,884
Mono					287	318
Monterey					9,250	13,875
Napa					26,575	45,709
Nevada					2,365	3,385
Placer	45	450			41,663	62,052
Plumas					943	1,414
Sacramento	390	5,850	4,300	11,825	16,300	24,450
San Benito					13,430	20,065
San Bernardino			32,000	48,000		
San Diego			8,600	12,150	26,628	34,659
San Francisco					1,536	5,940
San Joaquin	314	1,570			29,332	43,998
San Luis Obispo			1,518	3,777	9,197	12,095
San Mateo					821	1,785
Santa Barbara			74,182	111,273		
Santa Clara	467	2,335			1,880	2,820
Santa Cruz					455	725
Shasta					15,540	22,810
Sierra					87	130
Siskiyou					28,752	43,678
Solano	170	1,700	40,100	70,175		
Sonoma	335	3,350	3,740	7,480	127,620	191,430
Stanislaus			4,400	12,495	44,371	66,556
Sutter			107	577	30,823	46,239
Tehama	1,721	8,605			152,782	229,173
Trinity			112	392	14,922	22,383
Tulare					178,820	284,474
Tuolumne					4,600	6,900
Ventura					40,053	65,839
Yolo	280	1,960	660	2,640	38,258	59,835
Yuba			75	300	27,336	41,005
Totals	5,367	\$33,745	343,281	\$536,763	2,041,396	\$3,071,668

REPORT OF STATE BOARD OF EQUALIZATION.

SCHEDULE A—Continued.

COUNTIES.	GOATS—COMMON.		GOATS—ANGORA.		POULTRY.	
	Number.	Value.	Number.	Value.	Number of Dozen.	Value.
Alameda	100	\$200	50	\$300	3,660	\$10,150
Alpine					80	240
Amador	1,842	1,650				
Butte	997	997	200	400	1,716	5,248
Calaveras	3,683	2,760	220	290	2,102	6,305
Colusa	1,484	2,260			2,892	8,676
Contra Costa					3,245	16,225
Del Norte					297	925
El Dorado	7,629	8,790			1,329	6,645
Fresno	768	750			4,827	14,481
Humboldt	544	660			2,047	4,824
Inyo	4,701	4,701	16	95	610	3,050
Kern	1,219	1,219			470	2,354
Lake	1,019	1,049			1,446	4,358
Lassen					464	1,392
Los Angeles	540	685			14,708	36,180
Marin					390	1,365
Mariposa	1,042	521	1,575	1,575	426	1,278
Mendocino	2,269	2,269			1,448	4,344
Merced	966	966			1,973	5,919
Modoc	273	273			969	2,898
Mono					158	991
Monterey	200	300	400	2,000	5,089	12,725
Napa	932	1,398			3,085	15,425
Nevada	985	985			858	4,290
Placer	1,606	1,606			2,221	8,884
Plumas	55	85			547	1,641
Sacramento	1,800	2,700			4,440	18,770
San Benito	399	310			2,344	5,860
San Bernardino	500	500			2,111	8,444
San Diego	1,365	1,391			2,093	6,601
San Francisco	50	370			985	4,924
San Joaquin	130	130			5,748	17,244
San Luis Obispo	483	497			3,477	10,431
San Mateo	195	195			595	2,985
Santa Barbara					1,900	9,402
Santa Clara	124	185			5,180	25,900
Santa Cruz	124	125			970	4,845
Shasta	4,367	4,568			1,640	4,680
Sierra	392	565				
Siskiyou	468	602			967	2,925
Solano	75	150			3,106	12,424
Sonoma	275	275	110	220	3,915	15,680
Stanislaus					2,587	7,761
Sutter	5	10			2,496	7,592
Tehama	219	314			1,858	5,573
Trinity					309	1,545
Tulare	1,991	1,783			958	2,645
Tuolumne	155	155			800	4,000
Ventura					1,764	5,292
Yolo					1,718	6,350
Yuba	160	160			350	1,050
Totals	46,130	\$50,109	2,571	\$4,880	111,078	\$373,706

SCHEDULE A—Continued.

COUNTIES.	WHEAT.		OATS.		BARLEY.	
	No. of Centals.	Value.	No. of Centals.	Value.	No. of Centals.	Value.
Alameda	56,328	\$56,328	1,200	\$1,200	69,360	\$52,020
Alpine	470	587				
Amador					1,500	1,295
Butte	222,348	222,348			35,547	28,448
Calaveras	940	900			3,620	3,745
Colusa	439,580	380,460			45,020	27,020
Contra Costa	638,544	638,544			19,940	11,964
Del Norte					80	80
El Dorado						
Fresno	17,860	18,630			3,960	3,365
Humboldt			9,120	6,425	1,460	920
Inyo	1,730	2,316	540	675	440	585
Kern	13,220	13,220				
Lake	2,455	2,455	262	262	1,674	1,674
Lassen	2,080	2,080	1,980	1,980	1,795	1,795
Los Angeles	34,040	34,040			52,040	16,985
Marin	500	500			800	475
Mariposa					2,280	3,025
Mendocino	5,935	5,342			675	675
Merced	57,540	51,785			13,768	10,326
Modoc	6,246	6,268	1,154	1,175	4,740	5,744
Mono	62	130	67	151	40	85
Monterey	51,200	30,720			194,560	58,370
Napa	64,975	64,975	1,960	1,274	2,500	1,500
Nevada						
Placer	7,270	6,038			6,320	4,287
Plumas	760	760	4,840	3,390	1,060	1,060
Sacramento	88,510	88,510	1,500	1,500	11,600	8,700
San Benito	89,910	89,135	100	50	48,330	19,415
San Bernardino	1,800	1,260			47,318	18,927
San Diego	9,608	9,606			11,855	5,855
San Francisco	341,543	341,543				
San Joaquin	847,500	814,946			116,680	58,340
San Luis Obispo	11,760	6,505			10,500	5,155
San Mateo	235	235	200	250	1,355	2,710
Santa Barbara						
Santa Clara	12,240	9,775			51,920	31,152
Santa Cruz	2,400	4,125	170	250	2,000	2,845
Shasta	5,355	5,355	250	250	6,853	5,251
Sierra			870	870	480	480
Siskiyou	10,780	8,025	3,920	2,940	3,760	2,580
Solano	101,620	101,620			79,672	37,836
Sonoma	7,980	7,980	4,320	3,888	9,215	7,329
Stanislaus	138,650	124,785			8,432	5,902
Sutter	215,500	177,852			28,240	15,560
Tehama	75,057	75,057			1,000	1,883
Trinity						
Tulare	63,220	50,582			17,000	12,707
Tuolumne	1,000	1,500			100	150
Ventura					112,400	39,340
Yolo	272,700	272,700			22,100	13,754
Yuba	84,760	67,030			5,400	2,980
Totals	4,006,211	\$3,796,552	32,453	\$26,530	1,059,479	\$534,624

REPORT OF STATE BOARD OF EQUALIZATION.

SCHEDULE A—Continued.

COUNTIES.	CORN.		BRANDIES AND OTHER LIQUORS.		WINES.	
	No. of Centials.	Value.	Gallons.	Value.	Gallons.	Value.
Alameda	1,800	\$1,800	49,450	\$98,900	489,200	\$48,920
Alpine						
Amador					5,000	1,250
Butte			3,650	3,650		
Calaveras	600	645	5,670	10,175	12,660	2,580
Colusa	2,120	1,825	10,000	11,349		
Contra Costa			10,000	10,640	160,500	12,840
Del Norte			1,060	2,112	562	337
El Dorado			1,040	950	24,260	3,890
Fresno	380	250	19,272	16,425	449,080	60,085
Humboldt			23,000	23,040		
Inyo	3,685	3,855	1,135	1,215		
Kern			7,000	7,082		
Lake			446	550	41,200	4,800
Lassen			55	212		
Los Angeles	24,340	8,080	108,637	20,490	485,920	61,490
Marin						
Mariposa			826	1,653	3,000	600
Mendocino	276	207	6,517	13,034		
Merced						
Modoc						
Mono						
Monterey			10,000	11,300		
Napa	4,420	4,420	43,200	12,960	4,225,000	338,000
Nevada			100	150	6,950	1,785
Placer			1,400	1,063	30,175	4,450
Plumas						
Sacramento	3,900	3,315	8,700	6,090	18,750	2,440
San Benito	340	170	300	450	10,000	1,000
San Bernardino			2,640	5,280	144,200	28,840
San Diego	160	149	1,768	1,768	6,497	1,849
San Francisco			700,000	711,208	2,400,000	244,717
San Joaquin			4,018	4,018	68,040	10,206
San Luis Obispo	560	280	4,462	4,996		
San Mateo			5,375	5,375		1,360
Santa Barbara						
Santa Clara	660	660	143,065	143,065	1,857,560	130,030
Santa Cruz	100	90			100,000	12,960
Shasta	250	250	2,459	4,977	4,950	3,030
Sierra						
Siskiyou			3,180	6,335		
Solano			5,270	4,743	200,100	20,010
Sonoma	2,680	2,384	43,080	30,156	2,946,370	235,709
Stanislaus	200	140	125	187	25,500	6,378
Sutter	720	540	210	535		
Tehama			465,000	96,500		
Trinity			105	315		
Tulare			520	1,300	5,300	1,225
Tuolumne			1,000	1,500	2,500	3,750
Ventura	22,535	13,521	200	400	5,200	520
Yolo						
Yuba	60	20	4,955	9,910		
Totals	69,786	\$42,601	1,746,890	\$1,286,058	13,727,474	\$1,245,051

SCHEDULE A—Continued.

COUNTIES.	BEEHIVES.		HAY.		HOPS.	
	Number.	Value.	Tons.	Value.	Pounds.	Value.
Alameda			10,252	\$102,520		
Alpine	50	\$75	150	1,200		
Amador						
Butte	30	30	345	3,450		
Calaveras	190	190	178	1,780		
Colusa	48	123	290	1,745		
Contra Costa	135	270	1,080	5,940		
Del Norte	70	107	70	460		
El Dorado	140	140	22	290		
Fresno	4,110	4,110	1,252	6,530		
Humboldt			509	4,019		
Inyo	1,453	2,906	333	759		
Kern	1,250	2,500		3,306		
Lake	40	40	165	1,325		
Lassen			2,659	13,295		
Los Angeles	13,871	15,065	9,376	37,155		
Marin			350	1,925		
Mariposa			204	3,770		
Mendocino	50	50	386	3,860		
Merced	34	34	2,432	7,052		
Modoc	54	216	7,940	26,472		
Mono	157	183	645	1,531		
Monterey	510	510				
Napa			1,245	8,715		
Nevada	128	185	83	1,260		
Placer	191	226	379	3,431		
Plumas	48	76	535	2,458		
Sacramento	50	75	840	7,770	71,400	\$2,855
San Benito	125	65	5,341	18,265		
San Bernardino	5,140	5,140	843	4,215		
San Diego	14,947	15,497	3,795	14,384		
San Francisco			3,000	11,316		10,452
San Joaquin	641	641	2,441	12,205	20,000	1,000
San Luis Obispo	182	182	1,639	5,796		
San Mateo	30	30	667	4,560		
Santa Barbara	3,115	3,115				
Santa Clara	225	225	10,741	64,580	10,000	1,500
Santa Cruz			238	1,435		
Shasta	294	294	441	3,616	100	20
Sierra			121	1,210		
Siskiyou	454	1,353	627	3,455		
Solano			671	4,026		
Sonoma	95	95	1,260	10,080	16,000	2,720
Stanislaus	200	250	635	5,080		
Sutter	100	75	123	776		
Tehama	229	343	273	1,365		
Trinity			220	682		
Tulare	1,176	1,316	2,697	9,194		
Tuolumne	200	200	100	1,500		
Ventura	9,311	9,311	773	5,865		
Yolo			90	620		
Yuba			39	790		
Totals	55,043	\$65,244	79,362	\$434,933	117,500	\$18,547

SCHEDULE A—Continued.

COUNTIES.	WOOD.		LUMBER.		COAL.	
	Number of Cords.	Value.	Number of Feet.	Value.	Number of Tons.	Value.
Alameda	500	\$2,500	2,652,400	\$91,748	7,253	\$43,518
Alpine	12,320	18,480				
Amador	50	200	575,000	4,705		
Butte	1,565	3,130	9,174,000	91,740	18	180
Calaveras	4,490	9,955	293,000	3,170		45
Colusa	3,109	6,219	2,829,100	42,440		
Contra Costa	75	375	5,919,000	88,785	2,400	12,000
Del Norte			2,000,000	10,000		
El Dorado	12,380	20,790	1,671,500	11,710		
Fresno		4,931		80,533		
Humboldt		380		151,515		
Inyo	25	110	4,000	150		
Kern		8,774		15,110		
Lake	547	1,049		1,266		
Lassen	462	462	262,000	2,096		
Los Angeles	1,559	6,375	9,448,000	220,555	8,400	30,900
Marin				6,000		
Mariposa				4,220		
Mendocino	3,283	6,566	793,000	79,300		
Merced	480	1,439	200,000	4,000		375
Modoc			90,000	897		
Mono	922	5,330	177,000	1,770		
Monterey			2,600,000	26,000		
Napa	1,550	3,875	1,565,000	21,910	156	1,716
Nevada	3,162	4,845		23,205		
Placer	4,623	8,088	3,673,000	29,755	3,055	30,550
Plumas	337	249	418,000	2,090		
Sacramento	2,100	8,500	195,000	41,925	2,100	15,750
San Benito	2,275	4,970	352,000	5,350		
San Bernardino	1,320	3,960	2,167,000	29,205	191	1,528
San Diego	1,635	3,286	9,834,867	147,523	8,575	54,021
San Francisco		14,061		404,952		906,134
San Joaquin	3,319	6,638	9,475,000	113,700	724	5,792
San Luis Obispo	357	969	2,217,000	44,340		
San Mateo	1,575	3,760		4,800		
Santa Barbara		1,846		31,420		
Santa Clara	2,575	12,875	2,496,000	24,960	2,168	21,680
Santa Cruz	30,590	51,330		17,640		
Shasta	2,215	4,430	2,001,000	20,010		
Sierra				2,950		
Siskiyou	16,450	34,875	3,194,000	31,690		
Solano	75	300	4,124,000	57,736	100	1,000
Sonoma	9,375	18,750	1,927,000	21,197	35	420
Stanislaus	420	1,260	620,000	13,225		
Sutter	1,008	1,084				
Tehama	2,550	5,101	5,020,000	40,160		
Trinity	75	225	23,000	460		
Tulare	5,247	8,942	1,133,000	13,735		
Tuolumne				11,000		
Ventura	460	1,403	2,387,333	35,810		
Yolo	2,702	5,405				
Yuba	1,356	2,510	90,000	8,100	30	330
Totals	139,118	\$290,602	91,900,200	\$2,136,558	35,205	\$1,125,935

SCHEDULE A—Continued.

COUNTIES.	Farming Utensils— Value.	FIREARMS.		Fixtures of Saloons, Stores, and other Business Places.	Goods, Wares, and Merchan- dise—Value.	Harness, Robes, Sad- dles, etc.— Value.
		Number.	Value.			
Alameda	\$72,675	-----	\$3,250	\$61,285	\$920,685	\$10,165
Alpine	1,550	30	300	90	1,000	872
Amador	7,260	-----	-----	3,150	284,675	1,755
Butte	31,510	-----	5,830	38,785	478,965	27,105
Calaveras	14,365	-----	6,785	12,600	204,615	13,745
Colusa	71,021	746	9,200	14,075	260,660	37,387
Contra Costa	82,620	210	1,680	15,945	264,785	22,960
Del Norte	1,784	112	1,250	5,965	33,053	2,983
El Dorado	12,805	667	4,670	11,745	132,740	9,215
Fresno	49,527	-----	11,975	76,196	452,986	48,491
Humboldt	16,745	-----	5,250	40,460	502,220	21,723
Inyo	5,963	-----	1,876	4,035	64,132	8,144
Kern	24,440	-----	3,139	13,365	152,555	17,656
Lake	10,225	465	4,751	8,351	92,455	10,604
Lassen	5,872	102	1,350	3,470	37,065	13,875
Los Angeles	53,980	-----	14,750	927,760	2,186,240	98,940
Marin	3,550	-----	250	6,000	102,332	2,830
Mariposa	3,038	200	2,079	2,113	40,555	4,619
Mendocino	12,577	446	4,891	22,320	298,532	16,026
Merced	23,032	-----	3,952	14,220	113,715	20,930
Modoc	9,556	-----	3,733	3,550	140,447	16,047
Mono	5,312	68	682	3,626	42,075	3,520
Monterey	154,780	1,023	5,115	18,710	221,630	62,945
Napa	29,225	522	6,525	25,105	395,575	25,335
Nevada	6,795	-----	1,565	19,620	307,435	9,115
Placer	16,324	410	5,612	17,035	238,290	17,608
Plumas	2,796	-----	1,065	2,645	98,980	-----
Sacramento	50,160	885	7,080	97,640	2,112,280	65,370
San Benito	15,835	146	1,450	10,665	-----	12,390
San Bernardino	35,415	537	5,907	61,205	396,540	56,970
San Diego	18,321	-----	6,880	89,530	838,229	26,501
San Francisco	-----	-----	22,361	1,190,891	17,880,740	123,647
San Joaquin	65,195	587	8,805	60,720	701,739	57,981
San Luis Obispo	26,101	867	8,104	34,506	202,484	28,117
San Mateo	9,330	-----	900	5,180	79,840	16,665
Santa Barbara	22,148	-----	4,024	9,875	204,570	9,420
Santa Clara	52,500	420	4,200	91,130	1,089,460	61,960
Santa Cruz	11,545	129	1,235	25,925	250,685	16,540
Shasta	14,730	-----	5,580	16,890	229,260	20,105
Sierra	3,675	-----	415	5,005	111,100	1,565
Siskiyou	20,627	143	2,136	8,170	275,390	14,144
Solano	61,420	1,394	13,940	11,630	475,227	39,431
Sonoma	36,215	1,242	11,178	59,265	714,985	41,396
Stanislaus	34,561	816	6,528	28,641	209,845	37,465
Sutter	30,162	411	5,450	1,130	40,828	16,343
Tehama	22,494	469	4,690	23,720	242,075	46,406
Trinity	2,825	-----	1,265	922	67,126	2,912
Tulare	53,877	748	7,513	35,432	399,765	46,359
Tuolumne	5,009	-----	2,250	8,100	214,750	9,000
Ventura	18,182	-----	3,627	14,570	184,545	18,062
Yolo	39,860	-----	3,275	7,295	299,582	26,350
Yuba	16,890	-----	685	19,735	330,580	7,915
Totals	\$1,397,395	13,795	\$250,883	\$3,289,993	\$35,620,922	\$1,327,008

REPORT OF STATE BOARD OF EQUALIZATION.

SCHEDULE A—Continued.

COUNTIES.	SEWING MACHINES.		WAGONS AND OTHER VEHICLES.		WOOL.	
	Number.	Value.	Number.	Value.	No. of Pounds.	Value.
Alameda	5,820	\$58,200	12,520	\$302,875	625	\$125
Alpine		375	80	3,200		
Amador	182	4,790	1,249	50,820		
Butte	1,152	1,628	3,347	120,520	2,300	230
Calaveras	837	13,720	1,394	63,300		
Colusa		12,783	3,209	128,362	545	81
Contra Costa	614	7,982	2,516	93,092		
Del Norte	174	1,845	241	10,345		
El Dorado	792	11,790	1,367	59,145		
Fresno	1,917	26,218	4,108	188,690		
Humboldt	1,452	15,620	2,375	99,425		
Inyo	192	2,510	466	28,185		
Kern		5,711	1,122	57,233		
Lake	454	6,248	1,164	55,324	2,400	300
Lassen	532	3,364	722	39,901		
Los Angeles		72,205	12,705	480,420		
Marin	252	2,560	1,001	56,225		
Mariposa	203	2,911	438	21,835	700	40
Mendocino	799	9,996	2,033	92,910		
Merced	510	6,772	1,703	71,930	50,000	3,250
Modoc	479	7,042	1,377	53,625		
Mono	100	1,469	269	11,522		
Monterey	2,682	43,715	5,467	244,160		
Napa	1,465	26,736	2,885	152,905		2,250
Nevada		14,055	1,278	67,960		
Placer	875	13,832	1,858	84,330		
Plumas	225	4,215	646	34,525		
Sacramento	1,003	20,060		239,605	13,100	1,310
San Benito	586	5,795	1,467	45,330		
San Bernardino	1,207	14,835	2,547	101,880		
San Diego	1,816	19,024	3,724	144,938		
San Francisco	17,936	263,331	11,716	744,609		37,763
San Joaquin	1,802	27,030	4,399	246,344		
San Luis Obispo	1,267	15,094	2,898	106,724		
San Mateo	320	3,535	1,344	73,925		
Santa Barbara		11,485	3,614	159,016		
Santa Clara		37,600	5,115	375,900		
Santa Cruz	766	9,925	2,451	101,290		
Shasta	846	10,557	1,719	66,027	500	40
Sierra	128	2,275	343	19,045		
Siskiyou		8,512	1,524	77,040	2,500	350
Solano	1,890	20,790	2,200	66,000	11,000	990
Sonoma	2,140	25,680	4,335	229,655	3,740	561
Stanislaus	1,015	14,413		125,341		
Sutter	547	7,973	2,119	78,550		
Tehama	690	11,085	1,957	70,440		
Trinity	187	2,805	276	13,032		
Tulare	1,691	16,629	3,856	173,564		
Tuolumne	75	1,875	900	45,000		
Ventura	663	9,510	1,487	71,388		
Yolo	386	6,340	1,742	97,575		
Yuba	281	5,620	1,229	68,595	50,000	6,500
Totals	58,750	\$764,370	128,402	\$6,213,577	137,410	\$53,790

SCHEDULE A—Continued.

COUNTIES.	BUTTER.		CHEESE.		HONEY.	
	Number of Pounds.	Value.	Number of Pounds.	Value.	Number of Pounds.	Value.
Alameda	100	\$20	220	\$22		
Alpine						
Amador						
Butte						
Calaveras						
Colusa						
Contra Costa						
Del Norte						
El Dorado	200	30				
Fresno						
Humboldt		325				
Inyo					300	\$12
Kern						
Lake						
Lassen						
Los Angeles	700	175			33,200	870
Marin						
Mariposa						
Mendocino						
Merced						
Modoc						
Mono						
Monterey						
Napa						
Nevada						
Placer						
Plumas						
Sacramento	4,000	800	8,500	935		
San Benito						
San Bernardino						
San Diego					8,000	240
San Francisco						
San Joaquin			2,500	100		
San Luis Obispo	19,660	1,966	5,650	354		
San Mateo						
Santa Barbara						
Santa Clara				1,380		
Santa Cruz						
Shasta						
Sierra						
Siskiyou						
Solano						
Sonoma						
Stanislaus						
Sutter						
Tehama						
Trinity						
Tulare						
Tuolumne						
Ventura						
Yolo						
Yuba						
Totals	24,660	\$3,316	16,870	\$2,791	41,500	\$1,122

REPORT OF STATE BOARD OF EQUALIZATION.

SCHEDULE A—Continued.

COUNTIES.	STEAMERS, VESSELS, OR WATERCRAFT.		Machinery— Value.	Quick- silver in Flasks— Value.	Railroad Rolling Stock not Assessed by State Board of Equaliza- tion—Value.	Furniture.
	Number.	Value.				
Alameda		\$150,525	\$50,020		\$31,000	\$2,320,875
Alpine			1,090			2,203
Amador			2,875			30,300
Butte			114,815			209,180
Calaveras			13,430			66,370
Colusa			191,135			111,108
Contra Costa		56,500	61,750		9,500	96,175
Del Norte	8	1,160	17,460		29,000	18,813
El Dorado	3	150	37,855			72,910
Fresno			106,115			256,280
Humboldt		76,830	75,720		104,750	192,655
Inyo			18,510	\$800		18,895
Kern			22,740			49,851
Lake	23	5,325	17,384			41,153
Lassen			20,962			19,169
Los Angeles	62	62,590	392,445			1,482,695
Marin		53,100	18,200			133,705
Mariposa			5,835			9,000
Mendocino		1,200	158,345			47,500
Merced			100,261			57,560
Modoc			22,436			30,290
Mono			8,796		10,275	7,390
Monterey			129,340			211,545
Napa	10	200	95,485	2,500		228,935
Nevada			66,855			128,440
Placer	5	225	50,520	370		114,543
Plumas			17,160			28,185
Sacramento			394,835		4,175	513,460
San Benito			27,775			42,750
San Bernardino	1	4,800	176,590	300		259,315
San Diego	104	90,940	135,792		96,670	346,986
San Francisco		5,582,950	2,489,524		416,350	6,524,778
San Joaquin	24	2,880	269,911			374,993
San Luis Obispo	3	60	42,593			111,589
San Mateo	8	1,400	62,080			166,195
Santa Barbara			43,170			81,210
Santa Clara			295,350	17,255		624,700
Santa Cruz			89,470			125,835
Shasta			20,878			60,093
Sierra			10,500			29,910
Siskiyou			47,125			57,920
Solano	40	65,000	140,902			193,400
Sonoma			157,930	850	17,000	615,210
Stanislaus			136,843			100,321
Sutter		1,320	46,012			
Tehama			109,800			80,517
Trinity						16,723
Tulare			121,198			117,978
Tuolumne			40,000			51,810
Ventura			59,809			66,510
Yolo			105,095			129,815
Yuba			88,995			100,420
Totals	291	\$6,157,150	\$6,923,716	\$22,075	\$718,720	\$16,777,172

SCHEDULE A—Continued.

COUNTIES.	PIANOS.		Musical Instruments—Value.	Libraries—Law, Medical, and Miscellaneous—Value.	Franchises not Assessed by State Board of Equalization.	Tobacco.
	Number.	Value.				
Alameda	2,725	\$272,500	\$3,000	\$21,600	\$400,650	\$6,250
Alpine			500	300		
Amador			7,650	630		
Butte			46,030	7,530		
Calaveras	76	9,995	5,440	3,705	500	
Colusa			40,770	9,480		
Contra Costa	193	24,125	2,875	3,690	115,062	
Del Norte	26	3,900	1,525	3,027		
El Dorado	97	13,020	6,355	4,445		
Fresno			52,019	13,720		
Humboldt	298	36,905	8,565	12,542	2,600	
Inyo	13	1,550	2,155	1,610		
Kern			11,673	3,105		
Lake	30	4,500	10,713	1,970		
Lassen		2,625	2,831	1,390	500	
Los Angeles	2,011	204,785	78,495	63,850	61,320	
Marin	170	19,050	1,450	3,100		
Mariposa			3,280	768		
Mendocino	150	22,500	7,088	4,765	4,050	
Merced	88	10,535	5,892	3,265	5,500	
Modoc			7,206	2,105		
Mono	30	2,735	715	1,085		
Monterey			52,045	6,740		
Napa	407	81,400	8,575	18,675		
Nevada		32,875	14,005	7,710	1,500	
Placer			34,180	7,455		
Plumas	31	5,225	4,680	3,685		
Sacramento	780	89,700	9,810	11,690	1,050	
San Benito	136	14,680	1,965	1,550		
San Bernardino	284	38,910	10,027	16,640		
San Diego	587	46,717	15,662	21,345	59,450	
San Francisco			933,977	306,027	5,816,210	320,946
San Joaquin	625	78,128	18,765	23,030		
San Luis Obispo			29,064	6,249	6,250	
San Mateo	153	18,030	1,105	5,610		
Santa Barbara			36,745	8,740		
Santa Clara			175,585	24,150		100
Santa Cruz			36,425	2,910	6,000	
Shasta	76	10,410	7,490	4,695	8,315	
Sierra	61	8,410	3,210	1,630	2,000	
Siskiyou	99	15,928	15,922	3,305		
Solano	460	41,400	251	5,020	6,000	
Sonoma	517	7,755	18,945	15,915	2,500	
Stanislaus	159	20,681	14,880	9,573		
Sutter	92	13,810	6,670	1,470	500	
Tehama			24,880	5,860		
Trinity	40	6,000	750	1,435	109	
Tulare			42,910	15,750		
Tuolumne	80	16,000	2,250	2,000		
Ventura	141	18,780	7,325	4,280	4,750	
Yolo	464	56,911		5,065		
Yuba	123	17,460	15,550	5,290		
Totals	11,271	\$1,267,935	\$1,849,875	\$721,176	\$6,504,616	\$327,296

REPORT OF STATE BOARD OF EQUALIZATION.

SCHEDULE A—Continued.

COUNTIES.	DITCHES.		Consigned Goods— Value.	BROOM CORN.		Other Prop- erty—Total Value.
	Mining.	Irrigating.		Number of Pounds.	Value.	
Alameda			\$31,250	6,400	\$128	\$128,753
Alpine		\$3,660				
Amador	\$191,075					13,195
Butte	29,400	51,675				8,600
Calaveras	190,500	1,500				
Colusa				43,000	715	
Contra Costa						200
Del Norte	5,800					16,851
El Dorado	147,540	14,060				19,635
Fresno						26,298
Humboldt	2,000					5,160
Inyo	25	10,625				7,465
Kern						
Lake						
Lassen		14,000				
Los Angeles		15,000	8,190			220,623
Marin						
Mariposa	8,070	970				1,932
Mendocino						168,619
Merced		161,749				
Modoc						12,870
Mono	2,100					
Monterey						20,415
Napa						16,086
Nevada	177,475					110,495
Placer	58,375	79,125				36,735
Plumas	34,700					5,495
Sacramento			8,400			19,540
San Benito						36,295
San Bernardino		525,070				18,940
San Diego						4,500
San Francisco			476,055			1,636,168
San Joaquin			3,700			23,106
San Luis Obispo						47,079
San Mateo						67,977
Santa Barbara						
Santa Clara				8,000	200	50
Santa Cruz						188,220
Shasta	11,100	6,400				16,528
Sierra	57,625	2,700				
Siskiyou						70,614
Solano						6,000
Sonoma			2,350			14,752
Stanislaus	9,500	25,500				3,312
Sutter				174,000	3,045	9,943
Tehama		21,490				33,865
Trinity	68,325	4,195				
Tulare			12,850			37,778
Tuolumne	88,000	4,300				74,139
Ventura		9,430				
Yolo		29,000				
Yuba	6,010	13,320				240
Totals	\$1,087,620	\$993,769	\$542,795	231,400	\$4,088	\$3,128,473

SCHEDULE B.

Showing kinds of Personal Property Assessed, and the Assessed Value for 1890.

COUNTIES.	State, County, or Municipal Bonds.	Jewelry or Plate.	WATCHES.		Money.	Solvent Credits.
			Number.	Value.		
Alameda		\$45,400	8,058	\$80,580	\$46,250	\$192,300
Alpine		200	20	400	1,950	2,060
Amador			150	3,395	4,000	20,670
Butte		4,715	916	18,320	61,220	249,280
Calaveras	\$2,100	995	535	9,800	28,000	20,120
Colusa		2,060	642	15,040	128,920	164,665
Contra Costa		1,300	280	7,000	32,984	44,000
Del Norte		669	167	3,216	12,324	25,688
El Dorado		955	374	9,210	38,255	11,630
Fresno	2,000	12,000	1,584	29,678	40,414	162,151
Humboldt		1,565		18,512	146,095	164,208
Inyo		780		3,627	3,000	1,600
Kern		1,630		5,152	21,460	27,800
Lake		425	268	4,251	35,615	13,460
Lassen		420	138	2,535	5,300	72,593
Los Angeles		37,025	4,827	75,905	127,670	277,800
Marin		5,800	112	4,615	24,905	22,610
Mariposa		117		1,856	2,725	6,735
Mendocino		1,045	348	6,960	100,000	82,788
Merced		1,785	614	9,216	26,617	36,511
Modoc		690	269	5,020	11,950	81,835
Mono		488	68	1,909	5,550	1,677
Monterey		3,100	2,527	30,325	41,390	66,590
Napa		12,225	1,235	18,525	147,440	652,050
Nevada	700	1,220	220	9,535	64,810	101,935
Orange		1,180	789	10,490	14,000	85,235
Placer		3,655	647	19,345	79,911	110,646
Plumas	300	825	101	3,766	2,717	19,602
Sacramento		9,890	1,520	45,600	242,229	212,400
San Benito		600	118	2,570	14,780	74,470
San Bernardino		5,937	1,141	21,733	86,930	167,645
San Diego	8,000	6,752	1,636	24,599	74,333	201,975
San Francisco	184,555	514,969	7,503	221,903	6,607,041	10,639,064
San Joaquin		10,151	1,931	34,758	120,261	250,495
San Luis Obispo			838	8,380	72,356	15,138
San Mateo		5,850	153	5,575	80,000	204,240
Santa Barbara		4,725		12,610	21,475	35,860
Santa Clara		14,375	2,022	55,560	469,045	123,315
Santa Cruz		615	305	6,375	35,955	8,640
Shasta	11,670	815	472	8,925	36,620	25,729
Sierra		200	61	2,630	8,200	22,550
Siskiyou	400	1,125	169	4,605	112,682	145,701
Solano		2,835	807	12,102	89,269	55,007
Sonoma	1,500	17,645	2,365	37,840	137,800	289,070
Stanislaus		3,860		19,920	46,808	106,771
Sutter			515	9,175	30,990	72,537
Tehama		1,015	415	8,720	37,065	32,400
Trinity	5,305	2,075	190	5,700	14,722	47,870
Tulare		2,230	839	12,293	73,991	125,669
Tuolumne		1,100	250	5,000	35,860	4,000
Ventura		275	439	7,093	38,896	152,464
Yolo		1,585	469	17,585	103,476	323,024
Yuba		2,220	210	5,420	89,790	38,315
Totals	\$216,530	\$753,896	49,374	\$1,008,854	\$9,933,997	\$16,092,667

SCHEDULE B—Continued.

COUNTIES.	Carts and Tanks— Value.	HORSES—THOROUGH- BRED.		HORSES—GRADED.	
		Number.	Value.	Number.	Value.
Alameda.....	\$876	120	\$36,000	276	\$27,600
Alpine.....	-----	-----	-----	130	4,500
Amador.....	-----	15	3,700	787	30,045
Butte.....	-----	9	2,925	1,955	156,400
Calaveras.....	1,500	-----	-----	2,680	107,280
Colusa.....	-----	15	4,850	6,645	278,530
Contra Costa.....	-----	42	21,000	1,480	148,000
Del Norte.....	-----	-----	-----	-----	-----
El Dorado.....	4,530	-----	-----	-----	-----
Fresno.....	32,730	39	17,390	-----	-----
Humboldt.....	-----	32	14,060	-----	-----
Inyo.....	1,950	6	3,300	29	5,490
Kern.....	-----	37	10,767	1,826	124,139
Lake.....	867	3	3,000	-----	-----
Lassen.....	-----	-----	-----	165	18,575
Los Angeles.....	-----	156	18,580	-----	-----
Marin.....	-----	-----	-----	1,003	45,095
Mariposa.....	-----	11	1,250	1,173	30,375
Mendocino.....	-----	2	800	290	33,350
Merced.....	-----	-----	-----	-----	-----
Modoc.....	-----	5	3,000	85	12,720
Mono.....	-----	-----	-----	23	2,925
Monterey.....	-----	9	8,550	28	11,200
Napa.....	121,375	35	10,500	-----	-----
Nevada.....	-----	1	300	-----	-----
Orange.....	4,410	-----	-----	24	7,850
Placer.....	-----	20	8,625	-----	-----
Plumas.....	-----	-----	-----	17	5,000
Sacramento.....	5,000	160	40,000	525	78,750
San Benito.....	850	8	3,200	38	5,675
San Bernardino.....	5,960	7	6,500	3,247	129,685
San Diego.....	-----	39	7,575	3,223	118,934
San Francisco.....	-----	-----	-----	-----	-----
San Joaquin.....	-----	76	35,188	-----	-----
San Luis Obispo.....	-----	80	16,000	5,673	136,165
San Mateo.....	965	1	3,500	709	108,600
Santa Barbara.....	-----	62	14,595	5,921	168,230
Santa Clara.....	90,352	77	38,500	-----	-----
Santa Cruz.....	3,725	8	2,800	-----	-----
Shasta.....	-----	-----	-----	-----	-----
Sierra.....	-----	10	1,750	696	26,260
Siskiyou.....	-----	4	1,900	-----	-----
Solano.....	-----	45	15,750	6,304	409,770
Sonoma.....	87,785	87	47,850	586	70,320
Stanislaus.....	-----	51	15,425	-----	-----
Sutter.....	-----	25	8,005	1,265	108,238
Tehama.....	35,000	14	2,800	38	10,515
Trinity.....	-----	8	2,400	100	8,500
Tulare.....	-----	44	12,845	-----	-----
Tuolumne.....	-----	5	1,250	1,200	48,000
Ventura.....	3,220	4	1,500	-----	-----
Yolo.....	-----	25	16,350	-----	-----
Yuba.....	-----	20	6,100	-----	-----
Totals.....	\$401,095	1,417	\$470,380	48,141	\$2,476,716

SCHEDULE B—Continued.

COUNTIES.	HORSES—AMERICAN.		HORSES—COMMON.		COLTS.	
	Number.	Value.	Number.	Value.	Number.	Value.
Alameda	10,360	\$414,400	106	\$2,120	406	\$10,150
Alpine					91	1,820
Amador	1,795	92,835			641	17,480
Butte	3,789	170,505			1,895	47,425
Calaveras	150	15,600			1,050	22,500
Colusa	1,050	95,835			2,821	70,450
Contra Costa	4,510	225,500	810	20,250	3,590	89,750
Del Norte	171	12,860	351	13,900	118	3,790
El Dorado	2,497	109,095			661	13,880
Fresno	2,563	151,820	10,966	394,422	3,783	76,090
Humboldt	784	67,620	4,213	174,495	1,312	28,840
Inyo	1,268	68,936	3,129	60,768	1,320	15,180
Kern	4,327	145,457			2,336	49,228
Lake	520	41,600	2,426	82,130	904	23,205
Lassen	677	50,775	6,729	175,355	1,452	16,178
Los Angeles	9,692	446,135	7,546	205,470	3,527	75,095
Marin	831	71,435			471	18,800
Mariposa	251	11,460			540	8,331
Mendocino	4,445	200,870			1,345	35,875
Merced	1,100	80,820	4,822	168,735	2,029	43,442
Modoc	2,690	118,605	7,009	171,658	1,899	25,277
Mono	199	11,330	887	23,330	405	5,225
Monterey	3,826	210,435	5,605	207,940	3,012	64,005
Napa	3,160	164,320	2,125	53,125	1,025	26,135
Nevada	970	62,095	1,218	38,065	758	15,460
Orange	4,680	192,531			1,344	27,165
Placer	1,187	99,330	2,428	91,905	1,161	31,625
Plumas	1,467	74,274			681	20,127
Sacramento	4,830	338,100	220	5,550	2,950	59,000
San Benito	2,181	130,900	1,996	57,840	3,020	78,520
San Bernardino	1,090	74,205	790	13,382	1,100	24,853
San Diego	1,924	105,255	3,478	82,771	2,014	31,274
San Francisco	14,892	933,470				
San Joaquin	4,185	324,338	9,421	301,472	5,537	127,351
San Luis Obispo	2,020	103,005			3,142	67,081
San Mateo	1,728	88,905			715	22,305
Santa Barbara	2,516	133,105			1,248	19,968
Santa Clara	8,053	561,720	2,653	95,860	3,207	118,885
Santa Cruz	3,639	166,880			688	16,500
Shasta	1,026	66,875	3,039	91,175	1,511	25,689
Sierra	195	9,700			369	5,965
Siskiyou	2,141	117,871	4,410	111,041	1,279	21,474
Solano	60	5,460	120	4,212	3,244	81,103
Sonoma	6,870	391,590			1,705	53,855
Stanislaus	1,111	100,000	5,719	257,345		
Sutter	1,710	90,207	659	18,025	1,752	54,000
Tehama	1,895	132,960	2,322	69,645	1,400	32,500
Trinity	1,030	32,960			50	1,500
Tulare	1,532	110,350	11,594	459,180	7,385	134,310
Tuolumne	500	32,500			395	7,900
Ventura	1,658	105,595	3,337	121,095	2,126	56,735
Yolo	5,476	449,714			2,444	97,330
Yuba	420	43,625	3,238	142,915	1,217	28,330
Totals	141,641	\$8,055,768	113,216	\$3,715,176	89,075	\$2,048,956

REPORT OF STATE BOARD OF EQUALIZATION.

SCHEDULE B—Continued.

COUNTIES.	CATTLE—BEEF.		CATTLE—STOCK.		CALVES.	
	Number.	Value.	Number.	Value.	Number.	Value.
Alameda	869	\$17 380	5,220	\$88,300	1,410	\$7,050
Alpine	30	600	412	4,120	410	2,050
Amador	227	6,300	7,061	83,795		
Butte	296	6,512	8,162	97,944	2,485	14,810
Calaveras	85	1,700	6,295	75,540	3,400	17,000
Colusa			8,792	109,710	2,415	12,070
Contra Costa	45	1,125	6,372	95,580	3,840	33,560
Del Norte			1,052	14,881	663	4,006
El Dorado			3,308	49,620	3,060	32,130
Fresno	182	3,116	43,403	433,037	4,643	23,114
Humboldt	1,076	21,730	16,870	257,870	7,620	39,085
Inyo	45	900	11,365	90,920	3,905	15,620
Kern	705	10,575	64,582	643,820	7,609	38,045
Lake	112	2,550	2,628	30,517	1,687	9,829
Lassen	213	4,260	16,322	163,220	7,832	39,160
Los Angeles			13,153	136,380	3,816	25,230
Marin			5,409	65,913	2,809	17,449
Mariposa	230	3,790	6,054	72,648	1,423	7,115
Mendocino	44	1,170	8,825	124,732	3,335	20,690
Merced	700	15,400	18,634	186,340	5,300	20,437
Modoc	200	4,000	30,934	309,725	10,699	53,615
Mono	1,285	25,735	5,096	35,466	685	2,620
Monterey			10,590	105,900	6,200	18,600
Napa	175	4,375	5,425	65,100	2,675	13,375
Nevada	3,415	36,555			1,193	6,805
Orange	158	2,880	5,053	58,040	2,093	11,855
Placer	80	1,695	2,891	37,534	1,876	13,027
Plumas	322	7,080	4,474	58,162	3,012	18,072
Sacramento	700	14,000	5,820	87,300	4,920	36,900
San Benito			18,641	186,410	4,680	23,400
San Bernardino	53	1,030	7,225	86,198	1,209	6,583
San Diego	148	2,448	21,388	282,712	5,822	32,929
San Francisco	232	7,835				
San Joaquin	15	450	18,580	185,800	2,409	14,454
San Luis Obispo	305	4,880	39,970	319,760	8,986	17,972
San Mateo	165	2,475	3,680	53,520	2,560	12,800
Santa Barbara			20,821	252,990	1,463	4,392
Santa Clara	142	2,840	13,789	137,890	4,411	22,055
Santa Cruz	334	5,685	2,153	24,775	617	3,210
Shasta	80	1,205	8,938	116,192	2,824	16,134
Sierra			1,381	15,400	715	3,830
Siskiyou	181	3,802	18,354	183,540	6,329	31,645
Solano	201	3,014	6,226	93,767	4,430	33,226
Sonoma	235	4,700	3,618	47,034	3,640	18,200
Stanislaus	80	1,634	10,379	103,794	2,925	14,625
Sutter	17	385	3,850	47,032	1,529	11,506
Tehama	751	15,020	5,731	85,965	1,614	8,070
Trinity	30	600	3,025	45,375	1,065	10,650
Tulare	918	12,336	29,175	259,003	5,934	27,788
Tuolumne			1,600	20,800	350	1,750
Ventura			9,224	75,341	636	3,304
Yolo	119	2,890	4,223	60,200	2,158	19,730
Yuba	30	660	4,043	54,480	1,963	9,815
Totals	15,230	\$267,317	580,096	\$6,322,092	169,284	\$901,387

SCHEDULE B—Continued.

COUNTIES.	COWS—THOROUGHBREED.		COWS—AMERICAN.		COWS—GRADED.	
	Number.	Value.	Number.	Value.	Number.	Value.
Alameda	210	\$8,400	6,928	\$138,560	316	\$9,480
Alpine					170	2,550
Amador					2,613	52,050
Butte	27	1,755	2,098	52,450		
Calaveras	16	960			3,013	60,260
Colusa	28	2,125	3,040	60,960		
Contra Costa	60	4,500	5,810	116,200		
Del Norte					2,918	58,681
El Dorado			3,795	76,080		
Fresno			89	4,335	4,236	104,573
Humboldt	65	2,565	11,225	237,245		
Inyo	34	1,360	952	15,232		
Kern	31	2,790	2,778	41,671		
Lake						
Lassen			1,509	30,180		
Los Angeles	118	4,270	10,386	233,565		
Marin			26,004	470,031		
Mariposa	2	100	216	6,580		
Mendocino					4,873	102,730
Merced	37	1,850	1,849	36,980		
Modoc	11	975	1	30		
Mono						
Monterey			2,210	33,150	5,895	79,630
Napa	56	2,800	4,236	76,250		
Nevada	30	2,560	2,389	53,770		
Orange	8	700	2,120	41,925	553	14,482
Placer	12	540	3,108	65,245		
Plumas	7	350	3,540	70,800	118	3,685
Sacramento	125	6,500	7,930	158,600	200	6,000
San Benito	41	1,400	2,940	44,100		
San Bernardino	31	3,100			2,953	65,733
San Diego	23	965	720	18,639	3,966	82,126
San Francisco			8,152	165,930		
San Joaquin	37	3,700	5,301	127,224		
San Luis Obispo			20,544	328,704		
San Mateo			137	5,480	6,985	122,500
Santa Barbara	314	15,700			5,846	128,475
Santa Clara	121	6,210	8,071	166,615		
Santa Cruz	27	840	4,742	94,840		
Shasta						
Sierra			991	21,075		
Siskiyou	55	3,624	2,761	55,220		
Solano					5,608	112,167
Sonoma	82	6,970	16,230	292,140	510	12,750
Stanislaus			2,186	43,732		
Sutter	18	1,775	1,457	35,780		
Tehama	117	18,400	1,369	34,240		
Trinity	5	500	17	850	275	6,875
Tulare	57	3,255			5,804	114,860
Tuolumne	1	100			800	20,000
Ventura	29	1,290	1,550	28,350		
Yolo	140	2,000	4,575	93,110		
Yuba	30	1,185			3,077	56,000
Totals	2,005	\$116,114	183,956	\$3,575,868	60,729	\$1,216,207

REPORT OF STATE BOARD OF EQUALIZATION.

SCHEDULE B—Continued.

COUNTIES.	COWS—COMMON.		OXEN.		HOGS.	
	Number.	Value.	Number.	Value.	Number.	Value.
Alameda	975	\$9,750			1,950	\$9,750
Alpine					65	195
Amador			71	\$2,490	5,804	11,247
Butte			130	6,500	6,276	18,828
Calaveras			32	960		5,500
Colusa					17,883	44,700
Contra Costa					4,560	18,240
Del Norte			81	2,490	667	1,552
El Dorado			81	2,650	1,675	5,145
Fresno			156	6,245	8,776	21,481
Humboldt			255	12,600	6,384	12,532
Inyo					1,214	1,518
Kern						6,669
Lake	1,834	35,096	55	900	4,969	8,563
Lassen			60	1,370	1,176	2,952
Los Angeles			41	770	6,592	21,670
Marin			20	950	7,339	27,207
Mariposa					3,315	6,229
Mendocino			345	11,626	10,600	15,900
Merced					5,488	10,126
Modoc	1,621	32,062	82	1,930	2,142	4,706
Mono	442	8,840	2	70	155	527
Monterey					2,115	6,345
Napa					3,975	11,925
Nevada			21	575	783	2,725
Orange					2,617	7,435
Placer			178	5,905	1,767	6,734
Plumas			73	2,830	636	2,888
Sacramento			135	4,050	16,260	48,780
San Benito					1,107	1,660
San Bernardino			132	3,110	1,547	4,250
San Diego			17	543	3,765	10,703
San Francisco					1,974	12,905
San Joaquin					11,100	30,525
San Luis Obispo					6,337	12,675
San Mateo			44	1,160	1,048	5,845
Santa Barbara					2,248	7,285
Santa Clara			9	360	4,432	15,512
Santa Cruz			246	7,690	1,772	5,295
Shasta	4,008	75,676	90	2,700	8,096	17,486
Sierra			154	4,125	67	215
Siskiyou			235	6,753	4,652	11,891
Solano					6,717	16,794
Sonoma			132	5,280	13,824	44,928
Stanislaus					12,024	18,306
Sutter					7,327	14,592
Tehama					8,763	26,288
Trinity			30	900	150	600
Tulare			61	875	15,126	36,099
Tuolumne			60	1,800	2,200	5,500
Ventura					5,353	10,996
Yolo					10,366	30,836
Yuba			170	4,905	3,247	9,220
Totals	8,880	\$161,424	3,198	\$104,912	259,325	\$692,575

SCHEDULE B—Continued.

COUNTIES.	MULES.		JACKS AND JENNIES.		LAMBS.	
	Number.	Value.	Number.	Value.	Number.	Value.
Alameda	300	\$21,000	3	\$30	260	\$520
Alpine	15	350			200	100
Amador	169	8,980	2	400		
Butte	2,176	130,560	22	6,380	4,876	1,219
Calaveras	90	4,700	30	350	7,000	1,750
Colusa	5,275	375,810	50	8,790	4,270	2,135
Contra Costa	282	15,510				
Del Norte	36	1,770				
El Dorado	48	2,230	7	110		
Fresno	2,620	137,340	35	7,180	95,786	47,861
Humboldt	747	35,330	18	2,455	203	103
Inyo	480	12,240	10	2,000		
Kern	876	43,825		8,627	75,624	37,812
Lake	160	7,225	8	2,610		
Lassen	126	4,635	22	1,840		
Los Angeles	1,678	70,165	67	1,300	10,526	8,460
Marin	19	875			40	40
Mariposa	160	4,830	15	465	8,418	4,209
Mendocino	240	13,020	58	3,285	6,100	3,050
Merced	2,028	122,085	56	5,085	39,164	19,532
Modoc	328	10,640	40	14,600		
Mono	53	1,630	8	705		
Monterey	87	4,350	8	540		
Napa	465	27,900	19	3,225	3,950	1,975
Nevada	76	3,130	1	250	50	25
Orange	193	7,995			6,900	4,250
Placer	211	12,920	10	220	5,976	3,014
Plumas	23	910	8	210	18	9
Sacramento	345	31,150	25	4,375	9,780	4,890
San Benito	88	2,935	26	130	3,200	1,600
San Bernardino	484	18,955	70	1,600		
San Diego	592	20,775	27	240	5,445	1,545
San Francisco	151	10,350				
San Joaquin	2,550	201,450	49	15,484	9,768	4,884
San Luis Obispo	317	8,243	12	720	4,362	1,093
San Mateo	37	1,665				
Santa Barbara	804	33,800	17	380		
Santa Clara	185	10,660	4	50		
Santa Cruz	143	4,600	10	115		
Shasta	312	15,060	6	800		
Sierra	64	3,205				
Siskiyou	530	23,654	48	5,555		
Solano	1,040	94,744	128	8,960	310	310
Sonoma	395	17,775	33	594	11,210	5,605
Stanislaus	4,141	248,475	90	18,165	4,152	8,304
Sutter	1,386	104,323	6	2,080	324	81
Tehama	1,303	103,615	23	4,890	17,686	8,843
Trinity	278	10,220	3	750		
Tulare	1,350	63,570	42	7,925		
Tuolumne	75	3,750	45	450	2,400	1,200
Ventura	224	8,690	1	300		
Yolo	2,591	240,070	34	15,550		
Yuba	357	21,220	27	1,550		
Totals	38,763	\$2,384,909	1,223	\$161,410	337,998	\$174,419

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SCHEDULE B—Continued.

COUNTIES.	SHEEP—IMPORTED OR FINE.		SHEEP—GRADED.		SHEEP—COMMON.	
	Number.	Value.	Number.	Value.	Number.	Value.
Alameda	200	\$800			3,120	\$3,120
Alpine			400	\$400		
Amador					5,160	7,555
Butte			2,463	3,694	30,678	38,350
Calaveras					15,100	22,650
Colusa			400	1,200	69,188	103,765
Contra Costa					6,010	10,517
Del Norte					422	561
El Dorado					7,726	11,590
Fresno	28,567	85,700	13,589	27,435	266,657	406,300
Humboldt			459	1,195	97,249	97,249
Inyo			26	130	4,344	5,430
Kern	1,632	8,160			237,881	352,826
Lake					16,390	24,586
Lassen					11,025	16,537
Los Angeles	505	2,550	91,980	133,140		
Marin					175	305
Mariposa					83,580	125,370
Mendocino			117	585	130,746	196,119
Merced			284	710	85,967	128,950
Modoc			1,200	2,400	12,042	18,682
Mono					2,292	2,292
Monterey					9,100	13,650
Napa					25,575	44,755
Nevada					1,850	2,785
Orange			108,063	162,994		
Placer	55	500			42,426	63,504
Plumas					277	415
Sacramento	380	5,700	4,000	12,000	18,420	27,630
San Benito					9,970	14,955
San Bernardino					16,709	20,577
San Diego			6,100	8,650	19,343	24,647
San Francisco					4,422	18,825
San Joaquin			1,090	2,725	27,964	41,091
San Luis Obispo			2,267	2,833	9,071	9,071
San Mateo					345	730
Santa Barbara			116,720	175,080		
Santa Clara					2,149	3,086
Santa Cruz			264	425		
Shasta					12,000	24,000
Sierra					60	70
Siskiyou					14,229	21,343
Solano					31,053	46,580
Sonoma	310	3,100	3,675	7,350	105,234	157,851
Stanislaus			3,109	10,882	35,454	53,182
Sutter			130	420	32,926	49,404
Tehama	1,676	8,380			152,946	229,422
Trinity			110	385	8,726	13,089
Tulare					141,747	216,617
Tuolumne					4,000	6,000
Ventura					42,130	63,195
Yolo	580	3,460	2,335	4,670	31,936	48,870
Yuba					38,500	37,750
Totals	33,905	\$118,850	258,781	\$559,303	1,924,344	\$2,826,748

SCHEDULE B—Continued.

COUNTIES.	GOATS—COMMON.		GOATS—ANGORA.		POULTRY.	
	Number.	Value.	Number.	Value.	Number of Dozen.	Value.
Alameda	50	\$100			3,756	\$11,268
Alpine					80	320
Amador	1,398	1,165			112	448
Butte	875	875	185	\$370	1,678	5,034
Calaveras	3,683	2,760			2,100	6,300
Colusa	2,929	4,355			2,614	7,845
Contra Costa					3,285	16,425
Del Norte	6	6			309	969
El Dorado	6,480	6,480			1,379	6,895
Fresno	720	634			5,637	16,911
Humboldt	95	95	65	65	2,002	5,229
Inyo	5,840	5,840	16	96	656	3,280
Kern	932	932				2,877
Lake	675	686				4,206
Lassen					1,486	403
Los Angeles	93	115			7,346	22,780
Marin					433	1,555
Mariposa	768	384	1,250	1,250	477	1,431
Mendocino	1,841	2,046	5	50	1,364	4,092
Merced	974	974			1,971	5,913
Modoc	243	324			771	2,353
Mono	171	171			165	1,062
Monterey	220	330	400	2,000	5,123	12,810
Napa	875	1,310			2,850	14,250
Nevada	510	510			720	3,600
Orange	800	1,200			5,094	13,533
Placer	1,307	1,307			2,100	8,503
Plumas	144	168			557	1,672
Sacramento	1,500	3,000			5,480	27,400
San Benito	268	160			1,860	4,650
San Bernardino	734	738			2,119	6,305
San Diego	1,347	1,203			2,995	9,118
San Francisco	70	345				6,237
San Joaquin	68	68			6,629	19,887
San Luis Obispo	371	371			3,912	7,824
San Mateo	120	190				2,635
Santa Barbara						9,612
Santa Clara	160	240			5,163	25,815
Santa Cruz	75	75			1,966	4,970
Shasta	5,261	5,787				4,512
Sierra	222	345				
Siskiyou	30	45			883	2,649
Solano					3,081	12,324
Sonoma	260	260	130	260	4,210	16,840
Stanislaus	213	213			2,624	7,872
Sutter	42	63			2,788	8,444
Tehama	157	236			1,433	3,584
Trinity					310	1,550
Tulare	1,209	1,299			913	2,146
Tuolumne	100	100			900	4,500
Ventura	112	112			1,787	5,361
Yolo					2,239	8,375
Yuba	127	135			333	1,000
Totals	44,075	\$47,752	2,051	\$4,091	106,093	\$386,380

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SCHEDULE B—Continued.

COUNTIES.	WHEAT.		OATS.		BARLEY.	
	Cents.	Value.	Cents.	Value.	Cents.	Value.
Alameda	32,465	\$32,465	1,500	\$1,500	58,965	\$44,224
Alpine	400	500				
Amador						
Butte	308,217	277,395			26,132	22,905
Calaveras	2,400	4,300			1,200	900
Colusa	724,440	579,555			33,560	16,780
Contra Costa	1,162,160	1,162,160			11,268	5,634
Del Norte						
El Dorado						
Fresno	45,700	38,234			20,780	15,349
Humboldt		200		2,229		1,770
Inyo	1,720	2,150	200	250	40	100
Kern		18,270				
Lake	1,780	1,891	300	270	1,000	920
Lassen	1,900	1,900	790	790	200	200
Los Angeles	59,120	44,615	200	120	67,020	18,995
Marin						760
Mariposa						175
Mendocino	1,120	840	100	100		
Merced	258,500	206,800	15,015	9,009	17,161	10,297
Modoc	5,760	5,430	1,450	1,490	7,245	7,245
Mono		40		50		
Monterey	32,500	19,500			128,800	38,660
Napa	3,560	4,460	1,640	1,145	2,420	1,815
Nevada						
Orange					5,181	2,526
Placer	14,580	9,873	1,580	790	5,560	3,416
Plumas	680	680	2,740	2,204	800	800
Sacramento	79,520	79,520	1,400	1,400	10,700	8,025
San Benito	56,200	50,575			6,560	2,025
San Bernardino	120	112			6,763	4,258
San Diego	575	575			* 4,879	1,375
San Francisco*						
San Joaquin	1,016,420	904,288			123,540	61,770
San Luis Obispo	6,500	4,875			9,660	3,864
San Mateo						
Santa Barbara						
Santa Clara	27,000	27,000	80	80	33,340	16,670
Santa Cruz	3,100	1,050			2,100	1,050
Shasta	3,620	3,858	160	160	1,200	1,200
Sierra						
Siskiyou	8,160	4,624	1,080	810	600	450
Solano	257,971	219,276	400	400	37,030	18,515
Sonoma	6,345	6,345	4,115	4,115	8,760	5,256
Stanislaus	592,277	444,208			15,255	9,153
Sutter	309,600	216,115			15,260	7,530
Tehama	187,580	140,681	460	350	2,960	2,225
Trinity						
Tulare	142,120	87,076			9,280	5,472
Tuolumne	500	750			100	150
Ventura	3,240	1,620			137,600	41,348
Yolo	310,600	310,600			17,440	10,640
Yuba	80,740	60,555			8,400	5,545
Totals	5,749,190	\$4,974,961	33,250	\$27,262	838,759	\$400,592

* Grain, \$130.047.

SCHEDULE B—Continued.

COUNTIES.	CORN.		BRANDIES AND OTHER LIQUORS.		WINES.	
	Centals.	Value.	Gallons.	Value.	Gallons.	Value.
Alameda	400	\$400	32,546	\$65,092	525,400	\$42,032
Alpine						
Amador						
Butte			3,125	3,125	176	53
Calaveras	200	400	3,270	6,540	14,600	2,190
Colusa	900	460		12,895		
Contra Costa				9,870	160,800	16,080
Del Norte			1,284	2,528	504	472
El Dorado			1,300	1,300	47,930	3,965
Fresno			9,658	5,257	285,085	38,277
Humboldt				23,635	100	194
Inyo	210	210	820	2,050		
Kern				9,342		
Lake				945	21,300	1,032
Lassen						
Los Angeles	21,180	10,665	27,738	22,460	449,190	52,725
Marin						
Mariposa			125	1,090	350	215
Mendocino	820	615	5,710	11,420		
Merced	2,040	1,020				
Modoc					350	795
Mono				2,290		
Monterey				14,670		
Napa	675	505	45,300	13,590	3,985,000	239,100
Nevada			100	150	6,500	1,625
Orange	6,840	3,450	410	215	86,540	10,940
Placer			1,250	1,020	41,200	4,550
Plumas						
Sacramento	3,500	2,900	20,000	14,000	200,000	20,000
San Benito	100	100	400	600	10,000	1,000
San Bernardino						
San Diego	398	160		515	14,955	3,291
San Francisco				908,880		100,770
San Joaquin			4,800	4,800	57,680	8,652
San Luis Obispo	210	210	3,346	3,747		
San Mateo				5,025		2,506
Santa Barbara						
Santa Clara	200	100	104,395	104,395	1,043,950	104,395
Santa Cruz	240	125				8,865
Shasta				4,468		
Sierra						
Siskiyou			2,540	5,080		
Solano			12,195	10,975	26,500	3,975
Sonoma	1,840	1,472	41,860	29,302	2,546,200	178,234
Stanislaus	235	141			16,780	4,195
Sutter	500	300	25	45		
Tehama			700,000	120,000		
Trinity			120	360		
Tulare			1,085	2,170	2,280	427
Tuolumne			1,200	1,800	24,000	3,600
Ventura	25,300	7,993	200	200	5,300	530
Yolo						
Yuba	500	250	5,245	10,490	3,416	1,025
Totals	66,288	\$31,476	1,030,047	\$1,436,336	9,576,086	\$855,704

REPORT OF STATE BOARD OF EQUALIZATION.

SCHEDULE B—Continued.

COUNTIES.	BEEHIVES.		HAY.		HOPS.	
	Number.	Value.	Tons.	Value.	No. of Pounds.	Value.
Alameda			12,250	\$98,000		
Alpine	40	\$60	120	1,200		
Amador			49	300		
Butte	20	20	465	4,650		
Calaveras	170	170	350	2,100		
Colusa	118	195	135	1,080		
Contra Costa	140	280	1,468	7,340		
Del Norte	77	77				
El Dorado			452	3,655		
Fresno		3,435	1,483	7,976		
Humboldt	15	15	227	2,515		
Inyo	1,950	3,900	460	900		
Kern	1,448	2,896		3,840		
Lake			401	2,839		
Lassen			506	5,060		
Los Angeles	8,855	8,900	2,048	8,070		
Marin			140	975		
Mariposa	5	5	43	559		
Mendocino	65	65	239	2,390		
Merced	13	13	2,285	5,460		
Modoc	36	178	1,749	17,483		
Mono	114	138	303	1,790		
Monterey	490	490				
Napa			1,465	8,790		
Nevada	100	100	120	1,195		
Orange	2,601	2,560	638	1,840		
Placer	117	142	667	4,767		
Plumas			292	1,670		
Sacramento	60	90	740	6,660	42,500	\$1,700
San Benito	120	60	1,227	4,735		
San Bernardino	4,905	5,548	896	3,399		
San Diego	13,509	13,781	909	3,415		
San Francisco				12,360		745
San Joaquin	649	649	1,980	12,870	12,050	482
San Luis Obispo	137	137	1,087	4,348		
San Mateo		25	430	2,480		
Santa Barbara	1,680	1,680				
Santa Clara	110	110	6,499	31,325	3,000	450
Santa Cruz			282	1,400		
Shasta	78	94	423	4,378		
Sierra			187	1,010		
Siskiyou	317	647	101	850		
Solano			608	4,256		
Sonoma	75	75	1,340	9,380	14,000	1,680
Stanislaus	93	93	328	1,642		
Sutter	337	187	193	1,170		
Tehama	162	243	47	340		
Trinity			160	800		
Tulare	743	789	907	4,270		
Tuolumne	200	200	50	750		
Ventura	8,049	6,036	435	2,175		
Yolo			218	1,130		
Yuba			191	990		
Totals	47,598	\$54,083	47,583	\$312,607	71,550	\$5,057

SCHEDULE B—Continued.

COUNTIES.	WOOD.		LUMBER.		COAL.	
	Cords.	Value.	Feet.	Value.	Tons.	Value.
Alameda	650	\$3,250	1,892,450	\$101,673	13,060	\$78,360
Alpine	12,000	18,000	100,000	1,000		
Amador			685,000	7,120		
Butte	678	1,356	8,276,000	82,760	24	240
Calaveras	4,010	8,020	300,000	3,600		60
Colusa	1,801	4,505	1,055,000	15,825		
Contra Costa			6,100,000	91,500	2,400	12,000
Del Norte			5,000,000	24,000		
El Dorado	6,951	11,615	770,000	5,390		
Fresno		4,471		92,872		
Humboldt		1,900		185,755	200	1,450
Inyo			24,000	960		
Kern		4,315		19,931		
Lake	560	1,195	174,200	1,540		
Lassen	2,015	2,015	73,000	730		
Los Angeles	1,467	4,430	4,919,117	115,465	4,089	20,605
Marin				4,850		
Mariposa			1,380,000	11,040		
Mendocino	3,608	7,216	8,612,100	86,121		
Merced	286	837	200,000	4,000		
Modoc	26	58	442,000	3,748		
Mono	3,923	23,518		2,250		
Monterey			2,470,000	24,700		
Napa	1,465	3,660		54,265	146	1,460
Nevada	5,785	8,690	2,547,500	25,475	690	4,830
Orange	10	30		10,000	7	50
Placer	8,771	22,584	3,084,000	30,840	2,450	24,500
Plumas	66	50	450,000	2,700		
Sacramento	3,420	17,100	200,000	40,000	2,000	10,000
San Benito	800	1,600	280,000	4,200		
San Bernardino	220	890	1,702,000	21,275	928	7,505
San Diego	19	68		104,641	12,605	68,054
San Francisco		11,785		551,075		168,385
San Joaquin	2,536	6,540	7,743,000	100,659	716	6,086
San Luis Obispo	290	725	1,663,000	33,260		
San Mateo		2,950	229,000	2,750	1,000	5,000
Santa Barbara				23,400		
Santa Clara	3,300	13,200	2,950,100	29,501	1,530	9,180
Santa Cruz	23,885	24,300		16,960		7,370
Shasta	2,500	5,000	1,816,000	16,345		
Sierra						
Siskiyou		26,100	9,425,000	88,492		
Solano	40	200	2,010,571	28,148	218	1,964
Sonoma	8,715	17,430	1,720,000	17,200	50	550
Stanislaus	842	2,526	360,000	7,200		
Sutter	2,015	2,073		800		
Tehama	1,663	3,325	4,577,000	36,618	115	1,150
Trinity	70	210	45,000	900		
Tulare	4,451	7,870	2,432	24,560		
Tuolumne				10,000		
Ventura	336	835	3,303,600	33,036		
Yolo		5,605				
Yuba	2,819	6,840		15,545	25	275
Totals	111,993	\$288,687	86,581,070	\$2,216,735	42,253	\$429,074

SCHEDULE B—Continued.

COUNTIES.	Farming Utensils— Value.	FIREARMS.		Fixtures of Stores, Sa- loons, and other Busi- ness Places.	Goods, Wares, and Merchan- dise—Value.	Harness, Robes, Saddles, etc.— Value.
		Number.	Value.			
Alameda	\$64,325		\$2,920	\$68,350	\$1,050,463	\$8,425
Alpine	1,570	30	300	95	1,500	
Amador	7,360			3,350	201,775	1,375
Butte	32,215		5,672	37,895	439,860	25,643
Calaveras	14,300		6,700	12,600	200,525	13,745
Colusa	70,475	650	8,005	16,015	262,980	38,785
Contra Costa	84,050	182	1,456	16,010	263,000	22,725
Del Norte	1,227	113	1,028	6,445	33,615	2,791
El Dorado	13,935	382	38,200	12,420	134,425	9,000
Fresno	54,782		11,942	75,175	483,837	55,256
Humboldt	15,060		5,065	41,270	471,145	21,790
Inyo	8,335		1,895	5,870	61,055	7,868
Kern	26,064		4,341	11,970	175,487	19,306
Lake	8,399	389	2,630	6,400	75,336	10,328
Lassen	6,170	128	1,570	3,950	44,655	13,945
Los Angeles	36,335		8,865	363,985	1,907,855	65,130
Marin	2,400		225	7,300		2,315
Mariposa	2,651	165	1,313	1,532	21,991	3,322
Mendocino	11,924	372	4,089	13,390	273,218	16,330
Merced	20,667		3,190	14,830	107,540	21,576
Modoc	9,543		3,448	2,335	126,133	18,436
Mono	2,035		728	3,045	32,594	3,483
Monterey	161,795	1,091	5,455	19,750	225,750	63,190
Napa	26,465	575	7,045	23,750	321,340	23,225
Nevada	6,445	102	1,130	17,760	267,260	8,155
Orange	16,205		1,795	12,600	178,960	15,000
Placer	15,768	405	5,036	24,190	234,335	17,610
Plumas	4,720		981	2,820	97,981	7,670
Sacramento	41,750	860	8,600	80,730	2,024,855	58,345
San Benito	16,135	134	1,340	10,415	65,240	12,960
San Bernardino	29,243	410	4,974	60,340	362,062	45,125
San Diego	18,456		6,222	82,765	643,599	24,721
San Francisco			12,638	1,220,916	18,278,482	131,175
San Joaquin	65,071	558	8,370	60,150	708,503	58,609
San Luis Obispo	25,576		6,075	30,882	201,863	27,088
San Mateo	9,750		960	5,370	81,540	17,870
Santa Barbara	21,865		4,340	10,735	201,840	9,655
Santa Clara	38,245	330	1,650	74,555	1,092,983	60,133
Santa Cruz	10,160	104	1,005	28,995	242,770	16,085
Shasta	14,948		4,803	13,316	211,725	16,483
Sierra	3,010		320	3,430	91,150	1,575
Siskiyou	18,626	78	1,123	11,755	241,749	13,203
Solano	42,402	250	2,508	18,218	325,225	20,010
Sonoma	36,020	1,260	10,395	58,375	716,540	43,365
Stanislaus	30,454		4,391	28,500	194,972	38,430
Sutter	28,135	295	3,440	2,105	36,245	16,145
Tehama	18,705	345	3,445	67,130	189,939	18,950
Trinity	2,955		1,310	1,105	64,133	3,000
Tulare	36,353	644	5,128	46,020	475,345	39,227
Tuolumne	4,850		1,550	8,100	210,000	9,100
Ventura	15,285	203	2,400	11,105	164,721	15,870
Yolo	41,215		3,463	11,430	285,805	28,885
Yuba	17,430		485	21,235	343,205	8,010
Totals	\$1,311,859	10,055	\$235,059	\$2,792,779	\$35,149,996	\$1,259,443

SCHEDULE B—Continued.

COUNTIES.	SEWING MACHINES.		WAGONS AND OTHER VEHICLES.		WOOL.	
	Number.	Value.	Number.	Value.	Pounds.	Value.
Alameda	6,010	\$60,100	12,650	\$298,450	4,610	\$553
Alpine .....	.....	350	85	3,400	.....	.....
Amador	168	3,205	909	47,135	.....	.....
Butte	1,286	19,290	3,568	117,744	1,276	153
Calaveras	840	13,750	1,400	63,500	.....	.....
Colusa	1,029	13,975	2,993	119,720	.....	.....
Contra Costa	620	8,060	2,560	89,600	.....	.....
Del Norte	167	1,850	241	10,455	.....	.....
El Dorado	680	10,710	1,363	53,800	1,800	180
Fresno	1,843	27,309	4,644	196,755	.....	.....
Humboldt	1,607	16,070	2,469	87,625	.....	.....
Inyo	237	2,607	.....	34,485	.....	.....
Kern .....	.....	5,954	1,206	57,893	.....	.....
Lake	420	4,931	1,260	45,519	3,000	300
Lassen .....	.....	3,740	765	40,070	.....	.....
Los Angeles	5,539	60,175	10,814	339,615	.....	.....
Marin	211	2,340	1,015	56,375	.....	.....
Mariposa	173	2,852	394	13,550	.....	.....
Mendocino	596	6,940	1,903	82,480	.....	.....
Merced	500	6,394	1,710	67,800	50,000	3,250
Modoc	491	6,683	1,138	53,477	.....	.....
Mono	90	1,385	259	11,100	.....	.....
Monterey	2,690	44,345	3,481	245,905	.....	.....
Napa	1,525	25,165	2,945	151,675	.....	2,340
Nevada .....	.....	13,030	1,186	62,555	.....	.....
Orange	1,200	11,900	2,639	74,300	.....	.....
Placer	848	13,925	1,944	85,335	4,000	280
Plumas	228	4,380	653	32,930	.....	.....
Sacramento	1,020	20,400	.....	230,590	12,300	1,230
San Benito	545	4,250	1,488	46,130	.....	.....
San Bernardino	1,486	14,653	2,613	105,785	.....	.....
San Diego	1,897	18,222	3,952	131,880	.....	.....
San Francisco	12,169	182,980	9,982	726,190	.....	17,265
San Joaquin	2,229	28,977	5,126	246,048	300	15
San Luis Obispo	1,232	12,321	2,806	100,043	.....	.....
San Mateo	317	3,475	1,437	81,850	.....	.....
Santa Barbara .....	.....	10,940	3,817	185,590	.....	.....
Santa Clara .....	.....	35,150	.....	378,456	.....	.....
Santa Cruz	659	8,595	2,377	95,230	.....	.....
Shasta	904	11,300	1,907	72,364	.....	.....
Sierra .....	.....	2,150	312	17,030	.....	.....
Siskiyou	381	5,852	1,383	73,012	51,000	8,820
Solano	1,020	10,295	.....	100,070	.....	.....
Sonoma	2,210	27,525	4,387	245,672	3,220	483
Stanislaus	843	10,955	.....	106,883	.....	.....
Sutter	504	7,424	1,950	72,530	6,000	420
Tehama	671	10,060	1,832	60,452	.....	.....
Trinity	190	2,850	307	13,850	.....	.....
Tulare	1,418	14,812	3,537	146,074	.....	.....
Tuolumne	100	2,500	1,000	50,000	.....	.....
Ventura	638	8,560	1,547	57,515	.....	.....
Yolo	523	8,980	1,741	99,225	.....	.....
Yuba	278	5,560	1,415	71,325	65,000	6,500
Totals	60,237	\$850,201	121,110	\$6,057,042	202,506	\$41,789

REPORT OF STATE BOARD OF EQUALIZATION.

SCHEDULE B—Continued.

COUNTIES.	BUTTER.		CHEESE.		HONEY.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alameda	360	\$72				
Alpine						
Amador						
Butte						
Calaveras						
Colusa						
Contra Costa						
Del Norte						
El Dorado						
Fresno						
Humboldt	23,700	3,235		\$275		
Inyo						
Kern						
Lake						
Lassen						
Los Angeles						
Marin						
Mariposa						
Mendocino						
Merced						
Modoc						
Mono						
Monterey						
Napa						
Nevada						
Orange	60	15				
Placer						
Plumas	7,500	750				
Sacramento			3,150	315		
San Benito						
San Bernardino	500	75				
San Diego			350	35	400	\$20
San Francisco						1,995
San Joaquin			3,000	150	60	30
San Luis Obispo	21,000	1,470	4,400	264		
San Mateo						
Santa Barbara				1,575		
Santa Clara						
Santa Cruz						
Shasta						
Sierra						
Siskiyou	2,200	300				
Solano						
Sonoma						
Stanislaus						
Sutter						
Tehama						
Trinity						
Tulare						
Tuolumne						
Ventura						
Yolo						
Yuba						
Totals	55,320	\$5,917	10,900	\$2,614	460	\$2,045

SCHEDULE B—Continued.

COUNTIES.	STEAMERS, VESSELS, OR WATERCRAFTS.		Machinery— Value.	Quick- silver in Flasks— Value.	Railroad Rolling Stock not Assessed by State Board of Equaliza- tion—Value.	Furniture.
	Number.	Value.				
Alameda		\$75,325	\$63,225		\$31,000	\$2,276,450
Alpine						2,200
Amador			2,375			29,920
Butte			121,230	\$1,200		206,175
Calaveras			10,430	30		66,300
Colusa			187,065			114,285
Contra Costa		56,500	65,000			98,020
Del Norte	11	5,330	12,730			19,955
El Dorado			34,185			71,705
Fresno			157,559			217,261
Humboldt		133,015	90,170		100,230	188,730
Inyo			18,398	150		20,785
Kern			23,005			44,422
Lake	26	3,440	14,947			41,018
Lassen			21,025			19,965
Los Angeles	24	49,605	367,210		38,625	914,060
Marin		56,950	10,550			161,410
Mariposa			4,150			6,185
Mendocino	2	900	156,560		47,500	72,805
Merced			100,486			54,985
Modoc			26,718			35,102
Mono			15,510			7,545
Monterey			130,790			215,395
Napa		250	91,385	1,600		212,865
Nevada	1	250	50,905			114,440
Orange			21,640			111,125
Placer			66,675			124,740
Plumas			15,635	400		29,740
Sacramento			246,675		4,385	426,290
San Benito			22,750			43,680
San Bernardino	3	4,500	135,365			202,156
San Diego	110	36,248	192,976		16,400	239,369
San Francisco	196	19,755	2,207,286		377,675	6,770,791
San Joaquin	32	3,328	274,615			376,718
San Luis Obispo	3	60	41,945		1,250	103,692
San Mateo	8	1,400	79,165			165,200
Santa Barbara			37,730			85,395
Santa Clara			287,310	15,030		682,590
Santa Cruz			104,740			124,390
Shasta			37,964			60,400
Sierra			16,175			27,620
Siskiyou			73,480			55,690
Solano		57,190	143,604			186,345
Sonoma			137,840	1,925		621,310
Stanislaus			135,331			109,810
Sutter		950	63,355			43,767
Tehama			97,315			72,395
Trinity						17,825
Tulare			75,380			97,710
Tuolumne			30,000			51,000
Ventura			54,790		7,800	64,820
Yolo			107,030			140,810
Yuba			90,855			99,205
Totals	416	\$504,996	\$6,573,324	\$20,335	\$624,865	\$16,346,366

REPORT OF STATE BOARD OF EQUALIZATION.

SCHEDULE B—Continued.

COUNTIES.	PIANOS.		Musical Instruments— Value.	Libraries— Law, Medical, and Miscellaneous— Value.	Franchises not Assessed by State Board of Equalization.	Tobacco.
	Number.	Value.				
Alameda.....	2,740	\$274,000	\$2,800	\$30,125	\$390,950	\$4,227
Alpine.....			400	300		
Amador.....			6,350	1,125		
Butte.....			45,730	6,731	1,500	
Calaveras.....	77	9,995	3,440	3,700	700	
Colusa.....			37,895	8,345		
Contra Costa.....	205	25,625	2,960	3,690	116,287	
Del Norte.....	32	4,600	1,635	2,250		
El Dorado.....	97	12,270	5,985	4,275		
Fresno.....			52,792	14,326	1,000	
Humboldt.....	287	39,425	10,486	13,150	1,800	
Inyo.....	12	1,600	3,220	2,550		
Kern.....			9,608	2,145		
Lake.....			13,530	1,285		
Lassen.....		2,750	2,900	1,435		
Los Angeles.....	1,189	176,665	46,385	68,845	31,050	
Marin.....	196	19,550	1,735	3,500		
Mariposa.....			2,960	418		
Mendocino.....	364	26,380		3,645	280	
Merced.....	82	9,530	4,827	3,395	5,500	
Modoc.....	20	3,045	5,361	3,063		
Mono.....	32	2,890	855	1,750		
Monterey.....			50,550	6,550		
Napa.....	525	86,625	27,645	15,475		
Nevada.....	224	29,815	12,245	6,995	1,000	
Orange.....	231	19,925	12,330	3,985		
Placer.....			37,050	7,355		
Plumas.....	31	5,235	3,270	2,980		
Sacramento.....	795	79,500	8,895	10,550	51,650	
San Benito.....	140	12,740	1,550	1,550		
San Bernardino.....	319	41,689	14,812	16,250		
San Diego.....	671	49,150	16,327	25,130	56,600	
San Francisco.....			894,854	310,355	5,546,360	263,637
San Joaquin.....		78,295	18,304	22,705		
San Luis Obispo.....			21,798		4,690	
San Mateo.....	147	16,180	1,015	4,260		
Santa Barbara.....			35,970	8,930		
Santa Clara.....			176,690	21,335		
Santa Cruz.....			33,435	2,525	124,390	
Shasta.....	32	5,970	12,197	3,977	8,300	
Sierra.....		6,685	2,805	1,635	2,000	
Siskiyou.....		12,100	5,119	2,979		
Solano.....			39,906	4,544		
Sonoma.....		50,600	19,360	15,310	2,300	
Stanislaus.....	147	22,385	8,710	7,732		
Sutter.....	96	14,175	6,035	2,210	350	
Tehama.....			21,680	5,885		
Trinity.....	45	6,750	860	1,500	200	
Tulare.....			39,210	7,550		
Tuolumne.....	89	17,800	300	2,100		
Ventura.....	144	18,020	6,005	4,185	6,000	
Yolo.....			52,995	6,130		
Yuba.....	126	18,870	6,460	5,470		
Totals.....	9,059	\$1,198,834	\$1,850,234	\$717,685	\$6,352,907	\$267,864

SCHEDULE B—Continued.

COUNTIES.	DITCHES.		Consigned Goods— Value.	BROOM CORN.		Other Property— Total Value.
	Mining.	Irrigating.		Number of Pounds.	Value.	
Alameda			\$18,450	7,200	\$154	\$114,985
Alpine		\$3,760				
Amador						3,155
Butte	\$29,400	51,675				1,075
Calaveras	190,000	2,000				
Colusa						
Contra Costa						200
Del Norte	3,500					26,775
El Dorado	138,300	19,730				5,715
Fresno		194,300				36,874
Humboldt						4,535
Inyo	50	7,250				10,065
Kern						
Lake						155
Lassen		17,000				10,489
Los Angeles						531,950
Marin						
Mariposa	5,390	1,030				
Mendocino						209,778
Merced						
Modoc						5,307
Mono	2,000					4,335
Monterey						
Napa						23,140
Nevada	216,570					98,170
Orange						36,010
Placer	51,775	94,700				33,190
Plumas	43,143					13,433
Sacramento						1,000
San Benito						14,770
San Bernardino		501,230				8,495
San Diego						9,300
San Francisco			530,325			7,543,783
San Joaquin			2,740			24,484
San Luis Obispo						35,692
San Mateo						45,020
Santa Barbara						
Santa Clara						1,395
Santa Cruz						175,230
Shasta	10,800	10,000				13,455
Sierra	48,800					
Siskiyou						20,462
Solano						40,970
Sonoma			2,700			19,047
Stanislaus						7,618
Sutter				40,000	1,000	19,259
Tehama		21,490				39,745
Trinity	70,597	4,125				
Tulare			2,410			51,604
Tuolumne	85,000	4,300				
Ventura		8,600				83,475
Yolo		29,000				
Yuba	6,010	13,320				
Totals	\$901,335	\$983,600	\$556,625	\$47,200	\$1,154	\$9,324,110

MISCELLANEOUS AND AGRICULTURAL.

SCHEDULE A.

Showing the Total Assessed Value of Property and Rates of State Taxation from 1850 to 1890.

YEAR.	Total Assessed Value of Prop- erty in California.	Value of Per- sonal Property.	Per Cent of Per- sonal Property to Real Estate and Personal Property.	State Rate of Taxation.
1850	\$57,670,689	\$13,968,797	24.22	.50
1851	49,231,052	20,985,116	42.52	.65
1852	64,579,375	24,213,395	37.49	.65
1853	95,335,646	33,674,000	35.32	.60
1854	111,191,630	39,040,428	35.11	.60
1855	103,887,193	34,858,319	33.56	.60
1856	115,007,440	40,942,699	35.60	.70
1857	126,059,461	59,149,630	46.92	.70
1858	125,955,877	54,185,728	43.01	.60
1859	131,060,279	56,580,344	43.17	.60
1860	148,193,540	68,369,383	46.06	.60
1861	147,811,617	73,350,591	49.62	.60
1862	160,369,071	74,014,606	46.15	.77
1863	174,104,955	80,496,645	46.23	.92
1864	179,164,730	78,117,375	43.60	1.25
1865	183,594,312	79,782,436	43.47	1.15
1866	200,368,826	92,490,635	46.15	1.13
1867	212,205,339	100,105,600	47.17	1.13
1868	237,483,175	105,112,083	44.26	1.00
1869	260,563,879	104,723,592	40.19	.97
1870	277,538,134	108,001,588	38.90	.865
1871	267,868,126	86,174,230	32.17	.865
1872	637,232,823	219,942,323	30.40	.50
1873	528,747,043	118,425,520	22.20	.50
1874	611,495,197	210,779,127	34.46	.649
1875	618,083,315	199,243,292	32.07	.605
1876	595,073,177	140,431,866	25.27	.735
1877	586,953,022	128,780,824	21.77	.63
1878	584,578,036	118,304,451	20.23	.55
1879	549,220,968	112,325,860	20.45	.625
1880	666,399,985	174,514,906	26.18	.64
1881	659,835,762	160,058,309	24.24	.655
1882	608,642,036	134,048,419	22.02	.596
1883	765,729,430	167,338,644	21.85	.497
1884	821,078,767	166,394,997	20.26	.462
1885	859,512,384	172,760,681	27.90	.544
1886	816,446,700	151,937,132	24.64	.56
1887	956,337,008	164,444,909	17.20	.608
1888	1,108,044,877	172,768,272	15.60	.504
1889	1,115,014,022	170,981,078	16.00	.722
1890	1,099,772,904	168,960,150	16.00	.580

The values from 1850 to 1884, inclusive, are taken from the Controller's reports, which always differ from the reports of the Board. This difference is due to errors in addition by Auditors, afterwards corrected when report is made to the Controller.

SCHEDULE B.

COUNTIES.	1889.		1890.		Per Cent of Mortgages to Total Value Real Estate and Improve-ments in 1890.	ACRES ASSESSED.	
	Assessed Value of Prop-erty Mortgaged.	Value of Mortgages.	Assessed Value of Prop-erty Mortgaged.	Value of Mortgages.		1889.	1890.
Alameda	\$18,865,000	\$13,674,964	\$25,450,325	\$15,081,442	21.75	441,393	448,319
Alpine			10,050	10,050	5.00	32,000	34,389
Amador	731,185	450,035	889,595	630,010	18.20	249,431	251,083
Butte	6,512,121	2,917,984	6,023,712	3,169,490	20.00	753,548	759,006
Calaveras	520,450	383,765	825,400	371,280	11.00	384,676	391,103
Colusa	7,825,435	4,033,643	7,936,250	4,156,245	21.00	1,160,182	1,170,208
Contra Costa	3,803,754	2,062,181	4,098,752	2,457,422	20.00	464,327	466,102
Del Norte	262,791	164,836	249,610	152,026	9.00	109,840	114,708
El Dorado	639,275	459,275	604,475	453,355	15.00	360,000	369,388
Fresno	13,235,749	7,798,757	13,947,868	9,060,760	28.90	1,974,869	2,100,394
Humboldt	3,134,875	2,518,056	3,419,537	2,559,364	16.80	1,268,380	1,267,572
Inyo	145,048	120,378	168,062	119,095	13.40	174,356	144,493
Kern	793,846	538,843	1,384,132	774,917	9.30	1,138,358	1,179,124
Lake	1,104,435	681,563	1,260,350	716,380	22.00	235,455	271,551
Lassen	380,575	298,618	415,176	310,011	18.40	314,138	347,181
Los Angeles	13,058,346	10,031,491	10,216,600	8,191,970	13.70	1,632,928	983,497
Marin	2,987,755	2,552,922	2,921,376	2,254,703	23.40	330,051	304,751
Mariposa	242,617	155,765	277,581	161,092	10.60	314,167	314,167
Mendocino	3,081,575	1,962,030	3,012,814	2,030,487	22.27	1,205,848	1,205,848
Merced	5,164,221	2,662,676	4,568,906	2,896,327	24.23	1,058,000	1,070,485
Modoc	780,449	480,149	689,963	419,409	22.78	245,269	278,007
Mono			27,127	22,382	3.80	89,918	89,153
Monterey	2,754,375	1,560,715	2,959,455	1,763,505	14.44	1,104,007	1,146,887
Napa	4,686,743	3,286,593	4,763,275	3,125,935	28.20	369,764	381,996
Nevada	737,925	545,615	722,825	542,340	10.64	317,395	315,614
Orange			907,121	748,020	20.74		425,978
Placer	3,248,935	1,332,289	3,374,095	1,460,869	21.30	434,026	402,232
Plumas	335,195	242,753	411,444	279,525	15.00	290,726	303,897
Sacramento	8,061,680	3,973,870	8,938,964	4,253,506	15.63	607,467	606,005
San Benito	1,560,635	952,680	1,752,506	1,050,123	21.00	424,071	433,196
San Bernardino	5,879,550	4,706,445	6,201,115	4,797,060	27.81	512,648	689,005
San Diego			4,179,448	4,179,448	24.10	1,386,481	1,408,194
San Francisco	4,861,544	3,256,341	6,159,569	38,511,987	12.11	26,962	27,000

San Joaquin	15,209,710	6,510,485	14,984,152	6,486,646	20.60	854,678	870,023
San Luis Obispo	3,433,368	2,401,179	3,742,361	2,641,297	24.00	1,305,252	1,346,339
San Mateo	1,348,810	881,045	1,381,525	912,730	7.37		
Santa Barbara	3,681,410	2,685,613	3,747,820	2,805,246	21.46	1,017,780	1,119,644
Santa Clara	8,177,542	8,177,542	8,443,410	8,443,410	18.40	608,195	615,817
Santa Cruz	2,438,760	1,713,615	2,512,680	1,770,795	19.00	257,367	258,837
Shasta	1,162,256	714,368	1,278,173	846,362	20.80	466,308	501,453
Sierra	188,554	156,418	202,860	173,570	14.00	129,391	128,695
Siskiyou			897,854	664,572	17.65	400,000	410,595
Solano	4,434,621	3,940,220	5,832,695	3,972,278	25.05	512,739	512,839
Sonoma	8,476,925	5,182,343	8,236,325	5,141,225	20.80	779,001	824,975
Stanislaus	6,101,941	3,636,132	5,181,640	3,577,623	28.00	773,454	773,454
Stutter	3,048,770	1,296,194	2,874,014	1,724,639	21.40	374,531	374,531
Tehama	3,276,410	2,033,620	3,498,765	2,075,581	22.75	1,060,490	1,075,244
Trinity	211,680	162,212	250,000	131,060	16.30	91,762	125,352
Tulare	6,433,395	3,861,613	7,441,140	4,404,685	23.62	1,570,151	1,583,156
Tuolumne	392,745	180,355	455,000	280,495	12.30	252,253	301,037
Ventura	1,752,634	1,148,819	1,329,265	1,127,474	19.60	472,552	470,079
Yolo	5,747,352	2,814,553	5,846,364	2,923,082	17.24	577,584	484,216
Yuba	1,860,085	1,111,025	2,094,400	1,187,795	22.51	318,284	401,965
Totals	\$192,783,031	\$155,606,635	\$203,918,355	\$168,060,090		31,230,802	31,838,954

NOTE.—The Assessor of San Francisco reports the value of mortgages, but fails to report the value of property affected by such mortgages. Excluding San Francisco from the computation, the property mortgaged in 1889 is 63.46 per cent, and in 1890, 63.53 per cent of its assessed value. The total amount of real estate and improvements is burdened with mortgages to the extent, in 1889, of 17.63 per cent, and in 1890, of 18.87 per cent. The report from Santa Clara County is evidently an error.

SCHEDULE C.

COUNTIES.	NUMBER OF ACRES SOWN FOR CROP OF 1889.					Number of Fruit Trees Growing.
	Wheat.	Oats.	Barley.	Corn.	Hay.	
Alameda	21,265	175	20,967	318	43,110	500,816
Alpine	450	630	460	25	200	1,300
Amador	4,560	75	12,515	650	12,515	121,950
Butte	92,208	-----	24,619	-----	10,848	336,480
Calaveras	8,500	-----	1,100	200	12,000	95,500
Colusa	403,008	215	48,683	512	8,628	150,233
Contra Costa	77,915	-----	42,270	1,900	37,000	228,750
Del Norte	60	1,500	300	110	1,200	12,000
El Dorado	2,597	-----	2,002	-----	10,436	314,023
Fresno	169,512	526	36,242	570	8,342	281,545
Humboldt	20,564	25,792	19,450	200	35,602	49,060
Inyo	399	681	571	1,105	6,844	32,282
Kern	12,000	-----	25,000	12,000	-----	85,000
Lake	6,220	720	3,870	360	9,150	96,340
Lassen	-----	-----	-----	-----	-----	-----
Los Angeles	50,760	-----	35,290	17,400	17,040	-----
Marin	343	523	417	-----	4,760	44,817
Mariposa	639	634	5,078	-----	5,341	22,432
Mendocino	-----	-----	-----	-----	-----	10,000
Merced	240,000	-----	52,000	1,500	20,000	120,000
Modoc	45,800	38,400	33,000	-----	-----	150,000
Mono	-----	-----	-----	-----	-----	-----
Monterey	120,000	7,500	75,000	1,500	25,000	18,000
Napa	8,653	1,976	5,847	1,168	14,786	324,865
Nevada	-----	1,235	587	-----	3,061	215,588
Placer	16,249	2,865	9,670	-----	9,264	470,508
Plumas	-----	-----	-----	-----	-----	-----
Sacramento	78,100	415	38,460	5,375	38,650	548,450
San Benito	46,600	50	16,915	25	12,465	71,735
San Bernardino	3,551	-----	103,587	893	27,645	2,368,559
San Diego	14,026	1,550	30,447	2,084	9,523	380,176
San Francisco	-----	-----	-----	-----	-----	-----
San Joaquin	290,805	417	108,920	915	11,394	227,865
San Luis Obispo	98,385	4,246	48,360	765	25,780	38,325
San Mateo	1,825	2,916	3,720	530	11,137	31,750
Santa Barbara	71,427	-----	38,149	1,268	7,419	24,130
Santa Clara	17,240	115	20,370	185	32,820	1,590,860
Santa Cruz	5,126	4,920	3,110	2,025	4,900	283,120
Shasta	14,051	1,121	6,215	18	12,686	139,212
Sierra	150	1,000	1,850	-----	11,000	4,830
Siskiyou	9,554	3,646	5,360	25	33,682	8,224
Solano	57,624	191	35,720	670	1,930	639,724
Sonoma	15,820	4,728	13,159	11,317	67,890	949,779
Stanislaus	283,182	425	33,149	127	1,650	42,148
Sutter	123,929	368	21,935	765	11,379	244,507
Tehama	91,410	3,100	27,840	49	19,110	284,917
Trinity	10,008	500	200	500	15,000	21,000
Tulare	349,000	375	63,425	1,620	21,674	387,215
Tuolumne	4,000	800	2,000	-----	5,000	16,250
Ventura	2,637	-----	58,738	5,843	6,347	456,109
Yolo	155,000	-----	20,000	800	-----	136,623
Yuba	28,375	1,271	11,060	65	16,343	85,649
Totals	3,073,527	115,601	1,167,627	75,382	698,549	12,662,646

SCHEDULE D.

COUNTIES.	NUMBER OF ACRES SOWN FOR CROP OF 1890.					Number of Fruit Trees Growing.
	Wheat.	Oats.	Barley.	Corn.	Hay.	
Alameda	16,429	210	20,415	300	60,329	50,975
Alpine	400	650	400	25	300	1,520
Amador	3,575	50	10,980	675	15,870	121,995
Butte	73,767		19,721		12,592	394,867
Calaveras	6,500		2,500	250	8,000	95,500
Colusa	386,477	66	23,022	42	14,480	102,453
Contra Costa	50,250	1,600	30,540	1,800	42,250	219,180
Del Norte	36	907	164	71	494	8,851
El Dorado	973	204	560		8,044	313,925
Fresno	196,904	81	34,471	215	6,804	190,377
Humboldt	1,526	3,749	1,513	157	4,195	94,365
Inyo	2,316	836	455	1,466	7,870	36,917
Kern	17,000		3,000	10,000		101,000
Lake	4,200	450	2,600	600	8,250	81,300
Lassen						
Los Angeles						
Marin					5,867	42,213
Mariposa	527		1,802		5,985	25,000
Mendocino						54,000
Merced	177,500	7,500	25,100	1,200	8,700	155,810
Modoc	35,200	11,350	32,100		105,000	150,000
Mono	90	24	100		1,240	980
Monterey	135,000	6,000	60,000	2,000	20,000	19,200
Napa	7,462	1,645	6,374	1,275	15,648	442,165
Nevada					4,516	212,865
Orange	480	100	19,760	5,675	4,780	977,182
Placer	11,147	1,718	6,726		8,973	523,271
Plumas						
Sacramento	55,000	215	26,725	5,490	51,325	473,275
San Benito	35,800	50	13,680	75	17,715	69,650
San Bernardino	4,651		93,450	941	36,320	2,310,908
San Diego	25,145	1,582	27,350	2,473	12,682	511,742
San Francisco						
San Joaquin	199,579	309	53,049	413	9,955	238,367
San Luis Obispo	95,617	4,341	51,429	780	28,781	48,961
San Mateo	1,500	1,900	3,000	600	10,000	32,000
Santa Barbara	54,720		32,865	1,324	10,315	26,746
Santa Clara	15,950	174	18,550	328	37,150	2,120,000
Santa Cruz	5,248	5,060	3,226	2,040	5,210	302,165
Shasta	2,154	409	545		3,589	153,865
Sierra	300	1,200	1,600		1,080	6,050
Siskiyou	13,125	1,766	2,588	30	49,888	39,294
Solano						
Sonoma					63,240	989,875
Stanislaus	211,342	343	28,150	90	1,800	57,176
Sutter	43,412	380	4,899	106	4,802	185,216
Tehama	82,312	2,350	21,760		18,490	290,322
Trinity	1,000	500	200	100	2,000	10,000
Tulare	350,865	560	65,346	2,000	23,815	400,320
Tuolumne	3,500	700	1,800		800	16,300
Ventura	3,671	93	33,625	7,301	5,205	231,741
Yolo	103,500		12,700			148,550
Yuba	15,760	805	4,850	60	12,000	101,700
Totals	2,451,910	59,877	803,690	49,902	776,347	13,180,134

SCHEDULE E.

COUNTIES.	ACRES OF GRAPEVINES PLANTED, 1889.			Acres of grapevines planted ..
	Table.	Wine.	Raisins.	
Alameda	250	3,345	-----	3,595
Alpine	-----	-----	-----	-----
Amador	40	950	-----	990
Butte	506	111	295	912
Calaveras	200	1,180	20	1,400
Colusa	531	21	-----	552
Contra Costa	350	3,450	-----	3,800
Del Norte	-----	6	-----	6
El Dorado	300	1,485	-----	1,785
Fresno	183	3,800	12,182	16,165
Humboldt	-----	-----	-----	-----
Inyo	16	25	-----	41
Kern	-----	-----	-----	100
Lake	450	950	-----	1,400
Lassen	-----	-----	-----	-----
Los Angeles	-----	-----	-----	-----
Marin	-----	-----	-----	-----
Mariposa	-----	-----	-----	64
Mendocino	-----	-----	-----	200
Merced	200	400	1,460	2,060
Modoc	-----	-----	-----	-----
Mono	-----	-----	-----	-----
Monterey	500	-----	-----	500
Napa	265	13,630	-----	13,895
Nevada	-----	-----	-----	215
Placer	1,814	380	484	2,678
Plumas	-----	-----	-----	-----
Sacramento	1,525	5,138	225	6,888
San Benito	17	133	-----	150
San Bernardino	-----	-----	-----	13,787
San Diego	609	278	4,107	4,994
San Francisco	-----	-----	-----	-----
San Joaquin	920	1,107	429	2,456
San Luis Obispo	432	426	-----	858
San Mateo	80	700	-----	780
Santa Barbara	-----	-----	-----	543
Santa Clara	-----	-----	-----	11,375
Santa Cruz	320	1,025	-----	1,345
Shasta	99	140	147	386
Sierra	-----	-----	-----	-----
Siskiyou	-----	-----	-----	4
Solano	-----	-----	-----	2,160
Sonoma	1,075	20,805	-----	21,880
Stanislaus	-----	-----	-----	550
Sutter	94	51	504	649
Tehama	427	2,145	-----	2,572
Trinity	200	-----	-----	200
Tulare	4,350	2,495	-----	6,845
Tuolumne	-----	-----	-----	925
Ventura	-----	-----	-----	385
Yolo	800	2,000	1,200	4,000
Yuba	-----	-----	-----	215
Totals	16,553	66,176	21,053	134,315

SCHEDULE E—Continued.

COUNTIES.	ACRES OF GRAPEVINES PLANTED, 1890.			Acres of Grapevines Planted
	Table.	Wine.	Raisins.	
Alameda	625	3,000	-----	3,625
Alpine	-----	-----	-----	-----
Amador	40	1,010	-----	1,050
Butte	696	124	348	1,168
Calaveras	250	1,180	70	1,500
Colusa	162	32	406	600
Contra Costa	400	3,750	-----	4,150
Del Norte	3	-----	-----	3
El Dorado	290	1,280	20	1,590
Fresno	134	3,008	15,863	19,005
Humboldt	-----	-----	-----	-----
Inyo	18	10	14	42
Kern	30	70	1,050	1,750
Lake	450	1,280	-----	1,730
Lassen	-----	-----	-----	-----
Los Angeles	-----	-----	-----	-----
Marin	-----	-----	-----	613
Mariposa	17	70	-----	87
Mendocino	-----	-----	-----	170
Merced	200	500	4,235	4,935
Modoc	-----	-----	-----	-----
Mono	-----	-----	-----	-----
Monterey	500	-----	-----	500
Napa	275	12,090	-----	12,365
Nevada	-----	-----	-----	223
Orange	-----	-----	-----	-----
Placer	2,135	452	624	3,211
Plumas	-----	-----	-----	-----
Sacramento	1,685	6,060	240	7,985
San Benito	17	174	-----	191
San Bernardino	-----	-----	-----	18,426
San Diego	368	495	4,920	5,783
San Francisco	-----	-----	-----	-----
San Joaquin	975	1,197	531	2,703
San Luis Obispo	516	511	-----	1,027
San Mateo	75	690	-----	765
Santa Barbara	-----	-----	-----	527
Santa Clara	1,015	9,645	900	11,560
Santa Cruz	465	1,115	-----	1,580
Shasta	100	140	232	472
Sierra	-----	-----	-----	-----
Siskiyou	-----	-----	-----	-----
Solano	-----	-----	-----	-----
Sonoma	965	18,760	-----	19,725
Stanislaus	-----	-----	-----	164
Sutter	126	104	597	827
Tehama	360	126	2,126	2,612
Trinity	50	-----	-----	50
Tulare	7,930	-----	1,000	8,930
Tuolumne	-----	-----	-----	935
Ventura	32	90	283	405
Yolo	800	2,000	1,450	4,250
Yuba	-----	-----	-----	300
Totals	21,704	68,963	35,609	142,534

DETAILED STATEMENT OF TRAVELING, POSTAGE, AND CONTINGENT EXPENSES.

TRAVELING EXPENSES—FORTIETH YEAR.

From July 1, 1888, to June 30, 1889.

C. E. Wilcoxon	\$418 50
L. C. Morehouse	672 20
John T. Gaffey	607 00
G. E. Sloss	346 30
J. P. Dunn	160 75
E. W. Maslin	114 00
J. H. Smith, clerical work while traveling	170 00
	<u>\$2,488 75</u>

TRAVELING EXPENSES—FORTY-FIRST YEAR.

From July 1, 1889, to June 30, 1890.

C. E. Wilcoxon	\$689 45
L. C. Morehouse	628 35
John T. Gaffey	706 25
G. E. Sloss	553 70
J. P. Dunn	157 00
E. W. Maslin	288 95
W. J. Smith, at Los Angeles	30 00
	<u>\$3,053 70</u>

POSTAGE AND CONTINGENT EXPENSES ACCOUNT.

Fortieth Year.

Postage, stamps, books, and express	<u>\$120 82</u>
-------------------------------------------	-----------------

Forty-first Year.

Postage, stamps, books, and express	\$140 66
Clerk hire during months of August and September, 1889	100 00
	<u>\$240 66</u>

E. W. MASLIN,
Clerk.

Subscribed and sworn to before me this twenty-sixth day of December, 1890.

H. B. DAVIDSON,
Deputy Secretary of State.

ADDENDUM.

The information in the Report of the Assessor of San Francisco is deemed of sufficient importance to warrant its appearance in permanent form, and we therefore append it to our report.

**STATISTICS OF THE MECHANICAL AND MANUFACTURING INDUSTRIES
OF THE CITY AND COUNTY OF SAN FRANCISCO FOR THE FISCAL
YEAR ENDING JUNE 30, 1890.**

Agricultural implement manufactories.....		3
Men employed.....	80	
Value of manufactures.....	\$145,000	
Artificial stone manufactories.....		21
Men employed.....	180	
Value of manufactures.....	\$910,000	
Axle grease manufactories.....		4
Men and boys employed.....	20	
Resin consumed annually, barrels.....	2,500	
Fat consumed annually, pounds.....	47,000	
Chemicals consumed annually.....	48,000	
Value of manufactures.....	\$8,000	
Bag manufactories.....		3
Men, women, and boys employed.....	140	
Bags manufactured annually.....	12,500,000	
Value of manufactures.....	\$625,000	
Barrel manufactories.....		22
Men and boys employed.....	550	
Barrels, half barrels, and kegs made yearly.....	1,400,000	
Horse power of engine.....	100	
Barrels made for sugar refineries.....	740,000	
Syrup kegs made by tub and pail factories.....	35,000	
Aggregate value of manufactures.....	\$1,175,000	
Bedspring manufactories.....		1
Men and boys employed.....	24	
Copper wire, tons.....	400	
Value of manufactures.....	\$72,500	
Bedding and upholstering factories.....		14
Men and boys employed.....	270	
Value of manufactures.....	\$770,000	
Bellows manufactories.....		3
Men and boys employed.....	5	
Bellows manufactured.....	200	
Value of manufactures.....	\$8,400	
Belting manufactories.....		5
Men employed.....	100	
Value of manufactures.....	\$300,000	
Billiard table manufactories.....		4
Men and boys employed.....	85	
Billiard tables made yearly.....	550	
Value of manufactures.....	\$65,000	
Boot, shoe, and slipper manufactories.....		165
Men, women, and boys employed (white).....	1,600	
Chinese.....	1,400	
Value of manufactures.....	\$4,500,000	
Box manufactories (cigar).....		4
Men, women, and boys employed.....	325	
Number of boxes made yearly.....	2,215,000	
Value of manufactures.....	\$260,000	
Box manufactories (paper).....		6
Men, women, and boys employed.....	100	
Value of manufactures.....	\$130,000	
Box manufactories (wooden).....		7
Men and boys employed.....	420	
Horse power of engines.....	700	
Lumber used yearly, feet.....	3,000,000	
Value of manufactures.....	\$1,010,000	
Brass foundries.....		8
Men and boys employed.....	300	
Value of manufactures.....	\$450,000	
Breweries.....		24
Men employed.....	730	
Hops consumed yearly, pounds.....	1,100,000	
Barley consumed yearly, tons.....	65,000	
Beer manufactured, barrels.....	648,150	
Aggregate value of product.....	\$3,987,500	

Broom manufactories		8
Men and boys employed	150	
Value of manufactures	\$200,000	
Brush manufactories		4
Men and boys employed	50	
Value of manufactures	\$70,000	
Candle manufactories		2
Men and boys employed	120	
Candles manufactured, boxes	120,000	
Value of manufactures	\$240,000	
Carriage and locomotive car spring factory		1
Men and boys employed	22	
Springs made annually, tons	125	
Value of manufactures	\$37,500	
Carriage and wagon manufactories		50
Men and boys employed	525	
Carriages and wagons made yearly	2,000	
Aggregate value of manufactures	\$1,500,000	
Chemical works		5
Men and boys employed	35	
Nitrate soda used, tons	300	
Sulphur used, tons	1,200	
Nitric acid produced, pounds	250,000	
Value of manufactures	\$170,000	
Cigar manufactories		3,571
Men, women, and boys employed (275 white)	3,500	
Cigars manufactured yearly	110,667,865	
Cigarettes	40,000,000	
Tobacco manufactured into cigars and cigarettes yearly, pounds	2,235,450	
Value of manufactures	\$4,155,000	
Clothing manufactories		—
Men, women, and boys employed	2,750	
Value, including overalls, suits, and underwear	\$6,250,000	
Coffee, spice, and yeast powder factories		13
Men and boys employed	164	
Coffee ground and roasted annually, pounds	8,500,000	
Chocolate made annually, pounds	510,000	
Spices and yeast powder, annually, pounds	1,500,000	
Value of manufactures	\$2,100,000	
Coffin manufactories		2
Men and boys employed	30	
Value of manufactures	\$100,000	
Coppersmiths		8
Men employed	60	
Value of manufactures	\$200,000	
Cordage and rope manufactory		1
Men and boys employed	200	
Hemp rope manufactured, tons	3,500	
Horse power of engines	250	
Value of manufactures	\$650,000	
Cracker manufactories		3
Men and boys employed	265	
Horse power of engines	100	
Value of manufactures	\$1,000,000	
Cream tartar works		1
Men employed	50	
Cream tartar made yearly, tons	400	
Value of manufactures	\$110,000	
Cutlery manufactories		6
Men employed	50	
Value of product	\$80,000	
Dry docks (floating)		2
Men employed	40	
Capacity of docks—first, 4,400 tons; second, 2,000 tons	6,400	
Dry docks (stone)		1
Length of excavation in solid rock, feet	450	
Depth, feet	120	
Width of entrance, feet	30	
Capacity of length, feet	90	
Capacity of drawing, feet	22	
Width of top, feet	120	
Tubular boilers of 4-inch tubes	4	
Capacity of pumps for clearing per hour, cubic feet	325,368	
Dimensions of each boiler, inches in diameter	25	
Fire surface of boilers, square feet	38,000	
Men employed	8	
Total cost of work	\$675,500	

Electric manufactories		2
Men employed	75	
Value of manufactures	\$60,000	
Elevator manufactories		5
Men employed	40	
Elevators made annually	60	
Value of manufactures	\$27,500	
Flour and feed mills		18
Men and boys employed	400	
Flour made annually, barrels	375,000	
Hominy made annually, tons	300	
Buckwheat and rye flour made annually, tons	600	
Oatmeal and groats made annually, tons	3,100	
Cornmeal and farina annually, tons	1,800	
Feed barley annually, tons	22,500	
Cracked wheat annually, tons	900	
Split peas annually, tons	200	
Graham flour annually, barrels	6,000	
Cracked corn annually, tons	1,750	
Ground feed annually, tons	9,000	
Pearl barley annually, tons	360	
Aggregate value of manufactures	\$3,750,000	
Foundries and machine shops—		
Boiler and iron works		40
Pig iron consumed annually, tons	13,200	
Bar iron consumed annually, tons	14,300	
Rivets used annually, tons	450	
Horse power of engines	2,600	
Men and boys employed	4,000	
Aggregate value of product	\$5,500,000	
Fringe manufactories		6
Men, women, and boys employed	150	
Value of manufactures	\$400,000	
Fruit preserving factories		8
Men and women employed	900	
Fruits and meats put up annually, dozen cans	5,000,000	
Value of manufactures	\$3,000,000	
Fur manufactories		6
Men and women employed	150	
Value of manufactures	\$320,000	
Furniture manufactories		21
Men and boys employed	940	
Lumber used annually, feet	9,250,000	
Value of manufactures	\$1,500,000	
Fireworks		1
Men and boys employed	10	
Value of manufactures	\$35,000	
Gas works		2
Men employed	620	
Value of manufactures	\$12,000,000	
Glass staining, bending, and cutting works		3
Men and boys employed	60	
Value of product	\$900,000	
Glass works		1
Men and boys employed	120	
Furnaces	1	
Pots	6	
Value of manufactures	\$350,000	
Glove manufactories		12
Men and girls employed	750	
Value of manufactures	\$800,000	
Glue manufactories		2
Men and boys employed	43	
Glue made annually, tons	450	
Neatsfoot oil made annually, gallons	24,500	
Value of manufactures	\$170,000	
Gutta percha and rubber factories		2
Men employed	10	
Sets of machinery	2	
Value of manufactures	\$25,000	
Hat and cap manufactories		10
Men and women employed	200	
Value of manufactures	\$25,000	

Harness manufactories.....		50
Men employed.....	500	
Value of manufactures.....	\$1,250,000	
Ice manufactories.....		2
Men employed.....	25	
Tons made annually.....	4,630	
Capital invested.....	\$25,000	
Value of manufactures.....	\$18,500	
Ink and mucilage manufactory.....		1
Men employed.....	16	
Value of product.....	\$37,000	
Japanning and galvanizing factories.....		4
Men and boys employed.....	28	
Value of manufactures.....	\$200,000	
Jewelry manufactories.....		16
Men employed.....	150	
Value of manufactures.....	\$950,000	
Laundries (white).....		101
Men, women, and boys employed.....	1,025	
Laundries (Chinese).....		290
Men employed.....	2,500	
Last manufactories.....		2
Men employed.....	20	
Lasts made annually.....	21,000	
Value of product.....	\$20,250	
Lead pipe and shot factory.....		1
Lead pipe and shot made annually, tons.....	25	
Horse power of engines.....	100	
Men employed.....	35	
Value of product.....	\$350,000	
Linseed oil works.....		2
Men employed.....	60	
Oil cake made annually, tons.....	4,500	
Product of work, gallons.....	1,250,000	
Value of oil.....	\$800,000	
Value of cake.....	\$95,000	
Macaroni and vermicelli factories.....		7
Men and boys employed.....	60	
Macaroni and paste made annually, boxes.....	140,000	
Flour used annually, barrels.....	8,500	
Value of product.....	\$122,000	
Malt houses.....		4
Men employed.....	65	
Grain malted annually, tons.....	25,000	
Value of manufactures.....	\$7,850,000	
Marble works.....		30
Men employed.....	125	
Value of product.....	\$280,000	
Match factories.....		3
Men and boys employed.....	125	
Matches made annually, packages.....	2,500,000	
Value of manufactures.....	\$62,500	
Mirror manufactories.....		3
Men employed.....	43	
Number of square feet made annually.....	100,000	
Value of manufactures.....	\$200,000	
Musical instrument manufactories.....		19
Number of pianos and organs made annually.....	550	
Men and boys employed.....	100	
Value of manufactures.....	\$162,500	
Oakum manufactories.....		1
Men employed.....	12	
Bales made annually.....	9,000	
Value of product.....	\$35,000	
Oilcloth manufactory.....		1
Men and boys employed.....	20	
Value of manufactures.....	\$20,000	
Onyx manufactory.....		1
Men employed.....	4	
Value of product.....	\$12,000	
Potteries.....		1
Men employed.....	2	
Value of manufactures.....	\$100,000	

Provision packing factories.....		5
Men employed.....	240	
Beef packed, pounds annually.....	8,000	
Pork packed, barrels annually.....	6,000	
Ham and bacon, pounds.....	1,250,000	
Lard packed annually.....	1,200,000	
Tallow packed annually.....	2,250,000	
Value of product.....	\$1,300,000	
Rolling mills.....		1
Men employed.....	825	
Horse power of engines.....	700	
Scrap iron used annually, tons.....	22,000	
Coal consumed annually, tons.....	27,000	
Value of product.....	\$1,325,000	
Rubber stamp manufactories.....		8
Men employed.....	40	
Value of product.....	\$57,500	
Safe and vault works.....		2
Men employed.....	20	
Bar and plate iron used annually, tons.....	40	
Steel used annually, tons.....	65	
Value of manufactures.....	\$40,000	
Saw manufactories.....		3
Men employed.....	100	
Horse power of engines.....	50	
Steel used annually, tons.....	17,500	
Value of manufactures.....	\$140,000	
Shipyards.....		5
Men employed.....	250	
Number of steamers, barges, and other vessels built.....	29	
Tonnage.....	8,500	
Value of crafts built.....	\$1,750,000	
Shirt manufactories.....		40
Men and women employed.....	2,550	
Value of manufactures.....	\$990,000	
Silverware manufactories.....		4
Men employed.....	60	
Value of manufactures.....	\$500,000	
Soap factories.....		23
Men employed.....	240	
Soap made annually, pounds.....	1,600,000	
Value of manufactures.....	\$2,800,000	
Salt works.....		4
Men and boys employed.....	40	
Run of stones.....	7	
Number of tons annually.....	20,000	
Value of product.....	\$150,000	
Sash, door, blind, and finishing factories.....		10
Men and boys employed.....	1,400	
Horse power of engines.....	800	
Lumber consumed annually, feet.....	11,000,000	
Value of manufactures.....	\$4,500,000	
Soda water works.....		17
Men employed.....	150	
Value of manufactures.....	\$125,000	
Solder and babbitt works.....		2
Men employed.....	25	
Value of manufactures.....	\$110,000	
Sugar refineries.....		2
Men employed.....	800	
Sugar (raw) used, pounds.....	90,000,000	
Sugar (white) made, pounds.....	50,000,000	
Sugar (yellow) made, pounds.....	27,000,000	
Syrup made, gallons.....	425,000	
Value of manufactures.....	\$12,000,000	
Tanneries.....		23
Men employed.....	755	
Horse power of engines.....	1,460	
Bark used annually, cords.....	15,000	
Hides of all kinds.....	1,500,000	
Value of manufacture.....	\$2,500,000	
Tin ware, tin box, and can factories.....		6
Men and boys employed.....	180	
Value of product.....	\$225,000	

Type foundry.....		1
Men employed.....	120	
Value of manufactures.....	\$40,000	
Vinegar and pickle factories.....		6
Men employed.....	120	
Vinegar made annually, gallons.....	970,000	
Pickles preserved annually, gallons.....	120,000	
Value of manufactures.....	\$200,000	
White lead manufactory.....		1
Men employed.....	55	
Number of tons made annually.....	3,100	
Capital invested.....	\$265,000	
Windmill manufactories.....		3
Men employed.....	50	
Number of mills and casks made annually.....	1,000	
Value of manufactures.....	\$60,000	
Wire and wire rope manufactory.....		1
Men employed.....	250	
Horse power of engine.....	535	
Wire consumed annually, tons.....	11,000	
Value of manufactures.....	\$900,000	
Wool scouring and grading mills.....		6
Men employed.....	150	
Wool scoured annually, pounds.....	13,000,000	
Value of product.....	\$3,250,000	
Woolen mills.....		1
Men employed.....	125	
Number of power looms.....	6	
Cards, sets.....	6	
Spindles.....	5,000	
Blankets made annually, pairs.....	10,000	
Wool used (clean) annually, pounds.....	300,000	
Cloth (tweed and flannel) made, yards.....	300,000	
Aggregate value of manufactures.....	\$350,000	

REPORT

OF THE

TRUSTEES OF THE STATE LIBRARY

FOR THE

FORTY-FIRST FISCAL YEAR,

BEGINNING MARCH 1, 1890, AND ENDING JUNE 30, 1890.



SACRAMENTO:

STATE OFFICE, : : : : : J. D. YOUNG, SUPT. STATE PRINTING.
1890.

OFFICERS OF THE STATE LIBRARY.

BOARD OF TRUSTEES:

R. D. STEPHENS.....PRESIDENT.

FLEET F. STROTHER.
H. E. McCUNE.

W. S. GREEN.
E. O. MILLER.

LIBRARIAN:

W. D. PERKINS.

ASSISTANT:

W. S. LEAKE.

DEPUTIES:

GENEVIEVE GREEN.
W. H. HANLON.

JANITOR:

W. H. HANRAHAN.

REPORT OF TRUSTEES OF THE STATE LIBRARY.

STATE LIBRARY, SACRAMENTO, CAL.,
July 31, 1890.

To his Excellency R. W. WATERMAN, Governor of California:

We the undersigned, elected by the last Legislature a Board of State Library Trustees, held our first meeting March 1, 1890, and organized by the election of Hon. R. D. Stephens President, and W. D. Perkins State Librarian and ex officio Secretary of this Board.

The number of volumes ostensibly turned over to us was 79,966, but the number turned over to our Secretary on April 7, 1890, was 73,597 volumes.

The late Librarian, T. H. Wallis, had just completed a catalogue of the books in the Library, but on checking the same we found a number of volumes missing, a list of which appears in the report of our Secretary.

The amount of money turned over to our care was nominally \$19,-972 91, but out of this we paid old bills, or for books previously ordered, the sum of \$7,973 86, all of which will more fully appear by reference to the report of Librarian Perkins.

Mr. Wallis, as Librarian, had ordered several thousand dollars' worth of books, as we contend, without authority of law, some of which were received and registered during the last month of his incumbency, contrary to our express order. We therefore repudiated all these orders, and required all the dealers to file a waiver of all legal claims against the State on account thereof. In justice, however, to the dealers who had acted in good faith, all the books so delivered were purchased and paid for. Each case, after investigation, stood on its own merits, as each future case must do.

After due consideration by the Trustees, it was deemed advisable to have the property of the State in the Library protected by insurance, and at a meeting held May 3, 1890, the President and Secretary of this Board were authorized to carry the views of the Trustees into effect. The property has been insured for \$90,000, covering a period of three years from May 8, 1890, at a cost of \$1,260. The following is a list of the insurance companies and the amounts:

Insurance Company of North America	\$10,000 00
American Insurance Company	10,000 00
St. Paul Fire and Marine Insurance Company	10,000 00
Continental Insurance Company	10,000 00
State Investment and Insurance Company of San Francisco	10,000 00
Phoenix Insurance Company of Brooklyn	10,000 00
Providence-Washington Insurance Company	10,000 00
Westchester Fire Insurance Company of New York	10,000 00
Security Insurance Company	10,000 00
Total	\$90,000 00

We find a large number of volumes in the Library with covers off and otherwise badly mutilated. We trace the fact of so many missing volumes and this mutilation to the fact that the Library has, to a large extent, been made one of circulation instead of one of reference. It has been the practice of many, if not all the State officers, to take books out of the Library and loan them to friends on the outside. We cannot believe that the Legislature ever intended to confer privileges on State officers, *as citizens*, not conferred on other citizens, and hence we construe the statute allowing State officers to take books from the Library, to refer to such books as each may deem necessary to aid him in the discharge of his *official* duties; but it certainly never intended to authorize each State officer to confer special privileges on any and all his friends. As we believe the State Library can under no circumstances become a circulating library, but that it is for the use of the people of the whole State, for use *in* the Library, we are considering rules to that end.

We found that a large number of keys to the Library had been given out to various people, so that there was no responsibility for the proper care of the property of the State. We passed an order to have a new lock put on the main entrance, and that no keys should be delivered to any one except attachés. Since this time, however, the Library has been kept open on Sundays, and until 9 o'clock at night on week days.

No inventory of the books and other property of the State had been taken for a great many years, and on taking possession of the property we deemed it necessary to take an inventory. There has been no proper classification of the books on the shelves, and we will have to undertake this work. The salary list has, therefore, appeared large, but in the course of a few months, when everything gets in working order, the amount can be reduced some \$300 to \$400 a month. As stated by ex-Librarian Wallis, the work has grown so that it will require a greater force than in the past, and it is economy in the end to have the work well done.

We found several rooms and stairways in the Library uncarpeted, and, as the carpet on the main floor had been down twenty-one years, and was badly worn, we ordered new carpets throughout. A great many books were piled around on the floors for want of a place to put them; the collection of maps were so hung as to be of no practical value, and places had to be made for all of them, which involved a considerable carpenter's bill. There was no water on the second floor, and we ordered the plumbing necessary to put it there. These and other necessary improvements have caused a large outlay, but we thought it best to do necessary work at once and be done with it.

Respectfully submitted.

R. D. STEPHENS, President.
H. E. McCUNE.
W. S. GREEN.
FLEET F. STROTHER.
E. O. MILLER.

REPORT OF THE SECRETARY OF THE BOARD OF TRUSTEES

FOR THE FORTIETH AND FORTY-FIRST FISCAL YEARS, BEGINNING
JULY 1, 1888, AND ENDING APRIL 6, 1890.

SACRAMENTO, April 6, 1890.

To R. D. STEPHENS, *President of the Board :*

SIR: I have the honor to transmit my report of the State Library for the fortieth and forty-first fiscal years, ending April 6, 1890, and most respectfully ask that you make this a part of your report which will be made on June 30, 1890.

TALBOT H. WALLIS,
Secretary.

SUPPLEMENTAL TO THE PART OF THE REPORT TO BE MADE BY THE
TRUSTEES OF THE STATE LIBRARY JUNE 30, 1890.

STATE LIBRARY, April 6, 1890.

To R. D. STEPHENS, *President of the Board of Trustees of the California
State Library :*

DEAR SIR: I have the honor to submit the following report of this department for the fortieth and forty-first fiscal years from July 1, 1888, to April 6, 1890, and also, as per request of the Legislature of 1889, some suggestions for needed changes in the law governing the State Library, and recommendations of the "Association of State Librarians."

The number of volumes in the Library on July 1, 1888, was sixty-eight thousand four hundred and three volumes. The accessions since that time have been eleven thousand five hundred and sixty-two, making a total of seventy-nine thousand nine hundred and sixty-five, which the register shows in the Library on April 6, 1890. There have been added to the Library during the two terms that I have served, from April 6, 1882, to April 6, 1890, twenty-five thousand eight hundred and nineteen volumes.

On April 6, 1882, there was in the Library Fund \$1,727 04, and on April 6, 1890, it contained \$19,972 91, being an excess of \$18,245 87 over what there was in the Library Fund on April 6, 1882. A committee of the Legislature of 1889 experted my books and found the State Library was indebted to me for the amount of \$37 27, and I have this day balanced my accounts and find that there is due me from the same institution the amount of \$22 38.

There have been two catalogues completed since 1885, one of the Law Department, consisting of six hundred and sixty-five pages, and the

other of the General Department, of eleven hundred and seventy-two pages. The difficulties that arose in the preparation of the catalogue of the General Department were fully explained in the report of the Trustees for the thirty-eighth and thirty-ninth fiscal years, pages 8 and 9.

The crowded condition of the Library has necessitated the construction of additional cases, and over one thousand three hundred shelves have been added since 1882 to make room for more than twenty thousand volumes. Room 64, from which the mineral cabinet was removed, was neatly fitted up and now contains the Medical Department, Supreme Court records, Patent Office reports, etc.

Expenditures for carpentry, painting, plumbing, repairs, carpets, furniture, and extra help, which were absolutely needed, have been made from the Library Fund, or to be more specific, all the expenses were borne by this fund other than the salary of the Librarian, two deputies, and porter.

Notwithstanding this expense and the number of books added, the fund is now in the most flourishing condition. The postage, expressage, cartage, and freight charges have always exceeded the small annual appropriation of \$200 made by the Legislature. The amount appropriated should be at least \$300 per annum, as the fund provided for the support of the Library must be heavily drawn upon to keep the institution up to a high standard of usefulness. The register of this Library shows that we have nearly eighty thousand volumes. The histories of libraries have proven the fact that in their early years of existence the Librarians, in their eagerness to increase the number as rapidly as possible, register everything in sight. After twenty-five or thirty years elapse, it is found that there are hundreds of volumes short of the supposed registered number, and this is the case, not because they have been stolen, but because of their entire uselessness they have been destroyed. Patent medicine almanacs, temperance circulars, auction sales of furniture, advertisements, etc., have been included in the register, which have not been considered worthy of shelf room, and certainly not entitled to be placed in the catalogue. The Federal Government forwarded this Library several incomplete sets of Government publications, many of the duplicates of which have been registered. With the desire to complete one set in the Library, I returned to Washington nearly two thousand volumes and presented the public libraries in this State several hundred volumes more.

During the month of January we missed several volumes out of the Library, but were unable to get any clew on which to base suspicion upon any one in particular. Among the regular visitors was a young man who apparently was the last person to be guilty of theft, and who was always seen to leave the Library empty handed. Our suspicions were finally directed towards him, and upon investigation it was found that he had forwarded some books to relatives in a distant State. These were stopped in transit, and on inspection, found to belong to the Library. The party was arrested, and sentenced to prison for three years. In addition to State Library books, I recovered at the same time several volumes belonging to the Odd Fellows' and Mechanics' Libraries of San Francisco, and to the Odd Fellows' and Public Libraries of Sacramento. The thief wore a loose-fitting overcoat provided with capacious inside pockets, enabling him to secrete large volumes with little fear of detec-

tion. I am perfectly satisfied that the loss of books from this Library is no greater than from other libraries of the same size, and is much less than was anticipated when the State Controller commenced to take an inventory of the volumes received during my term of office. The construction of the Library is such that it is very easy for any one inclined to theft to do so without detection.

The Legislature of this State should pass a special law to provide for the punishment of the crime of stealing of books from libraries. Under the Code of this State the value of the property stolen, if it does not exceed \$50, is only petit larceny, and it is very seldom that at any one time books of that value will be taken, notwithstanding the fact that the thief during the course of a few months may have taken several hundred dollars' worth. If the party detected and arrested is in good standing in the community in which he lives, as was the case of the party lately sentenced, it will be very difficult to show evidence necessary to convict of burglary. The following are a few extracts published in the Library Journal, volume 9, page 87, "Literary Larceny:"

"It is astonishing," said State Librarian Tillinghast yesterday, "to witness the class of people who do most of the pilfering from our large libraries. As a rule they are professional men, lawyers, doctors, and even clergymen, who ordinarily would not be guilty of theft, but who seem to consider it quite pardonable to mutilate and carry off books and engravings. I receive notices frequently, telling me to closely watch persons who frequent the State Library, as they are likely to get away with books or clippings if not looked after. Many of those regarding whom I am thus notified are persons who ordinarily I never would suspect to be capable of such conduct."

Volume 3, page 195, "Literary Thieves:"

Even Webster's Unabridged has been hidden beneath the cloak of a visitor and carried off. Commonly, scarce and high priced books are the most in favor with these literary rogues, but instances are recorded where books that are to be had cheaply at the ordinary book-stands also attract their attention. Nor is it always persons who are without reputation who commit these acts. Several years ago one of the oldest and most learned professors in a university of St. Petersburg was detected in systematic pilfering, and several hundred valuable volumes recovered. Some years ago the Mercantile Library of Philadelphia missed a number of valuable books from its shelves, and the theft was traced to a doctor of a most respectable rank in society, and upwards of fifty volumes were recovered from him.

Volume XII, page 553, "Book Stealing in Paris:"

Book stealing seems to have been elevated into a regular trade in Paris, for, according to a return drawn up by the Prefecture of the Police, the number of persons prosecuted for this offense within the last two years has been one hundred and forty-five, of whom only five have been acquitted, while ninety others have been sentenced to fine or imprisonment, and the remaining fifty are still awaiting their trial. The amount of bail lodged and the fees paid for hearing has exceeded £3,000, these sums being exclusive of counsel fees and other legal expenses. The report goes on to say that several publishers have received anonymously sums varying from £20 to £700 from persons who had stolen books from them, but who were impelled by either remorse or fear to make restitution. The publishers of illustrated works, encyclopædias, and dictionaries are the greatest sufferers. Upward of ten thousand volumes have been seized and are now collected at the Palais de Justice for distribution among their rightful owners.

The agricultural, horticultural, viticultural, medical, engineering, musical, educational, and fine art departments have been well provided with standard publications. The entomological and botanical departments have been materially increased, and when the outstanding orders are filled it can be truly said that no other library in the United States can boast of as complete and valuable a collection. It has been our policy to purchase all the county maps of this State, as they were issued, and new maps of this State and of the United States when material

changes justified it. In 1889, we added to the Library a fine collection of large foreign maps, as follows: Standford's General Map of Europe, Austria-Hungary, Belgium, England and Wales, France, Germany, Greece, Ireland, Italy, Paris, Russia, Scotland, Spain and Portugal, Sweden, Denmark and Norway, Switzerland, Turkey, Asia, India, Japan, Africa, Abyssinia, South America, Argentine Republic, Australia, New Zealand, Mexico. Large accessions have been made of periodical publications, in pursuance of our object of enhancing the reference value of the Library. Some of the more important of the acquisitions are as follows: Transactions of the Royal Society of London from 1801 to 1888, Archæologia, Anthropological Review, Asiatic Researches, Cottage Gardener, Curtis' Botanical Magazine (a splendid set, complete from 1887), Edinburgh Philosophical Journal, Entomological Magazine, Floral World, Gardening, Geographical Magazine, Grevillea, Prize Essays and Transactions of the Highland and Agricultural Society of Scotland, Iron, Kitto's Journal of Sacred Literature, L'Electricien, Littell's Living Age, The Lancet, Methodist Magazine, Monthly Microscopic Journal, Quarterly Journal of the Geological Society of London, Revue des Deux Mondes, Temple Bar, Zoist, Transactions of the Zoölogical Society of London, Calcutta Review, Reliquary, Jersey Cattle Club Register, Coates' Herd Register, General Stud Book, Entomologist, Mind, Transactions and Memoirs of the Royal Astronomical Society of London, in ninety-one volumes, Sowerby English Botany, The Florist, Sugar Cane, Transactions of the Ray Society, Transactions of the Linnean Society, 1791 to 1888, The Academy, All the Year Round (new series, forty volumes), American Journal of Obstetrics, Andover Review, L'Année Scientifique et Industrielle, Annuaire Scientifique, Asiatic Quarterly Review, British Medical Journal, Chambers' Edinburgh Review, The Critic, English Mechanic, The Epoch, Foreign Quarterly Review, The Forum, Fraser's Magazine, Gardener and Forest, Good Words, from 1863, Hogg's Instructor, Illustrated London News, Irish Monthly Magazine, Journal of Forestry, Journal of the Franklin Institute, Journal of the Statistical Society, London Quarterly Review, Macmillan's Magazine, The Month, National Review, New Englander and Yale Review (new series), New Princeton Review, North American Journal of Homœopathy, North of England Institute of Mining Engineers, Penny Magazine, Public Opinion, Racing Calendar, Royal Society of Canada, St. James' Magazine, Sanitary Institute of Great Britain, Saturday Review, Truth, and the Veterinary Review.

Periodical publications are valuable, in view of the fact that they contain a vast amount of material not to be found elsewhere. They form an accurate index to contemporary thought, and the current numbers are essential to all who would be progressive. Complete sets of such as are named above are not readily acquired, as their number is limited, and as time goes on their scarcity and value will continue to increase.

The Law Department has been well provided for, and would be a credit to any State in the Union or foreign country. Its growth has been steady and uniform. We have purchased many valuable sets of legal periodicals, which are indispensable to the completeness of a law library. In 1886 we gave an order for digests, court reports, compilations and revisions of the following: Province of Good Hope, New South Wales, New Zealand, Queensland, South Australia, Victoria, Ceylon,

India, Bombay, Bengal, Madras, Northwestern Provinces, and the West Indies. The greater part of this order has been filled, but it may be several years before it is completed, owing to the scarcity of the books. When it is, the Law Department of this Library will be the most complete in the United States.

ASSOCIATION OF STATE LIBRARIANS.

In pursuance of a request made at the last Legislature, I take pleasure in submitting the following:

I had the honor, on May 8, 1889, at St. Louis, to call to order the State Librarians of the several States who met pursuant to a call by California. We organized and adopted the name of the "Association of State Librarians." The following are a list of the permanent officers that were elected: President, Melvil Dewey; Vice-President, W. H. H. Taylor; Secretary and Treasurer, John P. Dunn, Jr. Executive Board: President, Vice-President, and Secretary, with Talbot H. Wallis, State Librarian of California, and Wm. H. Egle, State Librarian of Pennsylvania.

The meeting was a success in every respect. The resolutions adopted by the Convention, in which twenty-eight States were represented, were carefully drawn in such a manner as not to arouse opposition from any source. The result is that our entire action meets the hearty approval of the Executive and Educational Departments of the several States and Territories, the publishers and the booksellers of the United States, the National Bureau of Education, A. R. Spofford, Librarian of Congress (who is a member), and the press generally. We were admitted into the American Library Association and became a part of that body. We were not received as a mere matter of form, but they gave us their good will and assistance. Our actions were indorsed by such men as Justin Winsor, Librarian of Harvard College, and a leading writer of the day; W. F. Poole, Librarian of Newberry Library, Chicago, and the author of Poole's Index; C. A. Cutter, Librarian of the Boston Athenæum; F. M. Crunden, President of the American Library Association; R. R. Bowker, publisher and editor of New York; C. A. Nelson, Librarian of Howard Memorial Library, New Orleans; W. R. Fletcher, Librarian of Amherst College, and editor of Poole's Index. Letters have been received from the leading publishers, booksellers, and men of prominence in the United States approving our actions and promising to assist us in this reform. The interest and support of such men is an evidence of a need of an improvement in the present system and a pledge that good results will be accomplished. Indiana, New York, Maine, Pennsylvania, and a few other States, have already answered our appeal and have remodeled their library laws. William F. Poole, who is widely known throughout the United States, addressed a letter to our association in which he said the members of the Association of State Librarians should be in high spirit over the success of their meeting, and they should feel confident that this was the beginning of the revolution which will change the library system of the whole country.

The following letter has been sent from Albany, New York, to the Governors and State Superintendents of the several States:

STATE LIBRARY, ALBANY, N. Y., February 24, 1890.

To ——— :

DEAR SIR: By direction of the Association of State Librarians, we submit to you below the resolutions adopted at its first conference, held in St. Louis, May 8-11, 1889.

This association had its origin in a widespread conviction that the proper scope and dignity of State Libraries was not yet fully recognized in most States; that there was no uniformity in laws governing State Libraries and regulating exchanges of public documents; and that it was desirable to bring about by legislative enactment an approximately uniform system of laws, usages, and rules for their management.

A State Library should not only be a complete reference library for all branches of the Government, executive, judicial, and legislative, and the repository of all materials for local history and biography, but it should also contain and furnish abundant facilities for using all desirable books of information relating to special industries and pursuits of the State, or calculated to lead to the introduction of industries and pursuits suited to it but hitherto neglected. In short, it should be fitted to serve all interests of the State by infusing into their conduct the highest intelligence and skill.

In the language of Hon. N. H. R. Dawson, ex-United States Commissioner of Education:

"The value of libraries, as one of the agencies of popular education, is beginning to attract the attention of those engaged in educational work, and it is especially important that matters pertaining to the history of the States, and of the country, should be made the special purpose of our State Libraries."

Nearly all the States have provided law libraries for their judiciary, but very few of them have fully recognized the practical value of having in their State Libraries legislative and governmental records of other States and of foreign countries, standard writers on public finance, public charities, agriculture, manufacturing industries, and other topics which come before Governors and Legislatures for action.

According to the instructions of the association, we add to the resolutions brief explanations and comments:

RESOLUTIONS ADOPTED BY THE ASSOCIATION OF STATE LIBRARIANS.

On State Legislation.

WHEREAS, The laws governing the libraries of the several States and Territories have been formed for each without regard to any other, or to any uniformity among them, and this diversity of legislation has resulted in many ways in great loss to said libraries, and has greatly retarded their growth and prevented the increase of their usefulness; and

WHEREAS, The State of California has, by resolution of her Legislature, instructed her Librarian to call a conference of the Librarians of the several States and Territories, for the purpose of securing the adoption of an approximately uniform system of laws, rules, and regulations for the government and control of such libraries;

Now therefore, we, the Librarians of the several States and Territories, in such conference assembled, do resolve:

1. That each State should provide for the maintenance of a State Library, by creating a fund that should be continuous and not dependent upon annual or biennial appropriations.

Most State Libraries are supported by annual appropriations. Experience has amply shown that this provisional system of support is wholly inadequate. The appropriations are usually made regardless of constantly increasing needs of the library, and are generally exhausted long before the Legislature again convenes, while the succeeding appropriation is rarely, if ever, sufficient to supply the deficiency of standard publications issued in the interval, and to meet present and future demands. To keep the library abreast with the times, there should be a continually accumulating fund devoted to its use.

California requires the Secretary of State to pay into the State Treasury, monthly, all fees of his office, to be set apart as a Library Fund. In most States similar legislation would provide proper support for the State Libraries without dependence on periodical appropriations.

Prof. J. C. Rowell, Librarian of the University of California, says of the California system: "I should regard it a very unfortunate state of affairs if the Librarian of the State Library were compelled during each legislative session to desert his sphere of duty in the library itself at the precise time when his professional services are most needed, and turn himself into a lobbyist to raise a possibly insufficient income for the following fiscal year. The income for the support of the State Library must not be dependent upon wire-pulling and political chicanery."

2. That the salary of each State Librarian should be made proportionate to the salaries paid other State officers in the same State, and that tenure of office should be made dependent on efficiency solely, and not on changes of administration, political or otherwise.

If State Libraries are to reach their maximum of usefulness, the Librarian's position must be recognized as of dignity and importance; appointments should be made with a view to fitness; tenure of office must depend on efficiency; and salaries should be such as to secure the best ability.

3. That each State should provide by law for the speedy transmission, under the direc-

tion of the State Librarian, to all State Libraries and to foreign Governments, of all public documents, reports, laws, transactions, etc., published by authority, and that these be addressed directly to the libraries.

A great desideratum in all State Libraries is a complete set of public documents, reports, laws, transactions, etc., published by authority of the Federal Government and of the several States. The present glaring deficiency in this respect is due to want of proper laws in each State providing for an uniform system of exchange. In most cases where there is any law on the subject, provision is made for transmitting such matter to the Governor, Secretary of State, or some State official other than the Librarian, and it is only through the courtesy of such official that these publications perhaps find their way into the State Library, which thus often loses most valuable publications essential to the completeness and utility of every public library. They are seldom found in book stores, and their distribution should be sufficiently controlled by the State Librarians as to secure their being properly addressed and promptly forwarded to every State Library in the Union. Provision should also be made for their regular distribution to a select list of college and public libraries.

The several libraries should receive not alone the regular sets of legislative documents issued as such, but also copies in their individual form of all reports of Boards, Commissions, or State institutions, and of all special documents prepared by State authority, so that sets of each may be placed in the separate departments of the library; *e. g.*, agriculture, insurance, taxation, education, insanity, etc.

4. That each State should provide by law—

(a) That all books published under its authority be properly indexed by a uniform topical alphabet, preserving the same heads of reference from year to year.

(b) That the title pages of all statutes and journals of the Legislature show the dates of convening and final adjournment of the sessions.

(c) That law reports give the extreme dates of the decisions on the title pages, and the date of the rendition of each decision above the title of each case.

(d) That each volume of law reports contain a table of cases, plaintiff and defendant, and *vice versa*.

(e) That the name of the State, with year and number of the Legislature where practicable, be lettered on the back of every volume.

5. That each State provide for the proper cataloguing and indexing, under the direction of the State Librarian, of all publications that have been or may be issued by authority of the State.

The prevailing mode of lettering, title-paging, and indexing public documents is exceedingly perfunctory, inaccurate, and misleading. To such an extent is this criticism true that the index of a public document often affords no reliable guide to its contents, while outside lettering and title page itself often fail to indicate with any accuracy or correctness the character of the work.

Hon. A. R. Spofford, Librarian of Congress, says of this matter:

"Believing fully in the efficiency of united effort to bring about any reform, I hope that this plan may be so digested as to details, that a uniform system may sooner or later replace the heterogeneous and vexatious methods of publication which make public documents the terror of Librarians and the despair of the reading public. For examples: see the indexes to almost any series of State documents, with every leading topic sought in vain in the alphabet, but hidden away (possibly) under "Report" or "State" or some other equally unmeaning and uncertain term—the same document, moreover, being rarely indexed under the same head in successive years. * * Nearly half the States persist in the stupid practice of anonymous titles, subjecting all other libraries than their own to great cost in lettering the books. There is no hope of reforming this except by positive statute—State Printers and binders being constantly changed."

6. That each State provide for the preparation and publication of a list of the sessions of its Legislature, from the first session to date, stating the time of the convening and adjourning of each session.

7. That each State provide for the proper exchange and disposition of duplicate books.

Most States have many duplicates, which, though useless to them, would be of great value to other States, but have neither laws nor facilities for exchange of such duplicates.

New York has just passed the following law, which solves these difficulties:

"The Regents shall have charge of the preparation, publication, and distribution, whether by sale, exchange, or gift, of the colonial history, natural history, and all other State publications not otherwise assigned by law. To guard against the waste or destruction of the State publications, and to provide for the completion of sets to be permanently preserved in American and foreign libraries, the Regents shall maintain in the State Library a duplicate department, to which each State department, board, or bureau shall send not less than five copies of each of its publications when issued, and after completing its distribution, any remaining copies which it no longer requires. The above publications, with any other books and pamphlets not needed in the State Library, shall constitute the duplicate department, and the rules for sale, exchange, or distribution from it shall be fixed by the Regents, who shall use all receipts from such exchanges or sales for the increase of the State Library."—Laws of 1889, ch. 529, title 1, § 18.

8. That the Governor of each State and Territory be respectfully requested to submit the foregoing resolution to its Legislature, and to urge upon it the adoption of the laws

necessary to carry out the reforms therein recommended, and also to impress upon it the propriety of adopting memorials to Congress in favor of the Federal legislation hereinafter suggested.

On National Legislation.

WHEREAS, The National Government has thus far not given to the State and Territorial Libraries the aid and assistance which it is desirable should be given; therefore be it

Resolved, That Congress should provide:

1. For free transportation by mail between State Libraries.
2. By international arrangement, for free transportation of books and other printed matter between State Libraries and departments of foreign Governments.
3. For a lower rate of postage on books.
4. That the privilege now enjoyed by the Library of Congress, and by societies, colleges, and schools, in the exemption of books from import duty, should be extended to State Libraries.

Books addressed to the Library of Congress are carried free through the mails, because of the high public utility of this institution. For the same reason the official libraries of the several States should be exempted from postal charges on matter transmitted between them, since securing full sets of the documents of each State in the libraries of other States is a part of a national and interstate polity rather than a mere local exigency.

Great difficulty is now experienced and great expense incurred in trying to make exchanges between State Libraries and foreign Governments. Whatever Congress and the Department of State can do to facilitate exchanges and lessen expense, would benefit individual States and the country.

Reducing postage on books would facilitate diffusion of good literature, and would aid popular education through the libraries, by removing what the Librarian of Congress recently characterized as "the present unwise and unjust discrimination against good books, which permits all the cheap libraries of novels to go by mail at 1 cent a pound, while all other books must pay 8 cents a pound, thus putting a Government premium upon trash, and taxing the diffusion of knowledge eight times as much as the diffusion of fiction."

Through an apparent oversight, State (and public) Libraries are not mentioned in the statutes as entitled to import books free of duty. The rulings of the Treasury Department allow libraries exemption from duties, but the law should be so explicit as not to leave libraries dependent on the rulings of the Treasury or the decisions of Collectors of Customs.

Resolved, That the President of the United States be respectfully requested to bring these matters to the attention of Congress.

General Resolutions.

WHEREAS, State Libraries are important factors in the educational systems of the several States and Territories; be it

Resolved, That the several State Superintendents of Public Instruction and the National Bureau of Education be requested to unite with us in bringing about the above named reforms.

WHEREAS, The American Library Association has, by the organized efforts of its members, accomplished so much for the good of libraries, and will appreciate so fully the objects we seek to obtain;

Resolved, That we ask their indorsement of our efforts to increase the efficiency of our libraries, and their hearty coöperation in obtaining action to that end; and,

Resolved, That a committee be appointed to draft an address setting forth in full the reasons and necessity for the adoption of the reforms we have recommended, and that said address be made a part of our action, and that said committee communicate these resolutions and address to all persons whose aid we seek in accomplishing our objects.

Resolved, That we pledge ourselves to use every effort with our several State officers, Legislatures, and members of Congress, and with all who can help us, to secure their active assistance in the accomplishment of these reforms.

On behalf of the Association of State Librarians, these resolutions are submitted to you, and you are respectfully urged to take such action as will help to accomplish the desired reforms.

Political Code, Sections 408, 409, 410, governing the distribution of State publications, should be amended so as to read to each State Library instead of to each State. Section 409, Subdivision 3, should read to each State Library one copy instead of to each State two copies. Section 409 should be amended also by inserting the word appendices after the word journal, on the first line. The following is an extract

from my letter of June twenty-eighth to the State Librarians of the several States:

In this State no provision has been made for the distribution of the Appendices to the Journals of the Legislature, now numbering nearly one hundred volumes, and including some of the most valuable of the miscellaneous reports. And there is no law compelling the several Boards, Commissions, Departments, etc., of this State to transmit to the State Libraries their reports and special publications. If the people of this country could realize the extent of the Federal and State publications, and see what a small proportion are in the State Libraries, they would exclaim, "Oh, shame!" This state of affairs is sufficient to convince any one familiar with libraries that something must be done in the several States upon the meeting of their respective Legislatures. The members of the Association of State Librarians intend to be heard in every State and Territory, and will no longer be deceived by such high-sounding resolutions (for example) as follows:

"Resolved, That these works shall be disposed of as follows: five hundred copies to be distributed gratuitously, under the direction of the [naming some State officer], to libraries, State institutions, and in exchange with foreign societies and institutions and notable persons."

But will demand that a law be enacted by each State providing for the direct and immediate distribution of one copy of all State publications, and will most emphatically request the Legislatures of the various States to have them forwarded to the State Libraries, and not go to the trouble of appointing a guardian to receive them.

The above resolution had reference to reports of the State Engineer on irrigation, which the State Libraries of the Union have failed to receive; and I sincerely hope in the future that the members of the Legislature will not consider a resolution of this kind of sufficient binding force to compel the distribution to State Libraries, but that they will pass a general law to the effect that one copy of all State publications be forwarded to each State Library.

There should be an Act passed by the Legislature giving the Librarian of the State Library power to close the Library at least once a year, and for a period not to exceed two weeks. This will give the Librarian and his employés an opportunity to clean and arrange the Library, and during this time he should also have power to prohibit any books from being drawn from the Library. The work in the Library has increased during the last eight years materially, owing to the addition of twenty-six thousand volumes to be catalogued, registered, etc., and the preparation and completion of two catalogues. The general work of the Library will continue to increase as the State develops. The Legislature should provide for more assistance, as the Librarian under the existing circumstances cannot take that care of the property, and attend to the patrons of the Library, as is expected of him. In 1870 the Library contained twenty-six thousand volumes, and the register now shows nearly eighty thousand—an increase of fifty-four thousand volumes. The force in the Library has not been changed since 1870, which was at that time, Librarian, two deputies, and a porter.

With due appreciation of the interest shown by the members of the Legislature towards the State Library and its officers, I have both the pleasure and the honor of subscribing myself,

TALBOT H. WALLIS,
Secretary.

DEBITS FOR THE FORTIETH FISCAL YEAR.

1888—July 1—	To balance on hand July 1, 1888.....	\$40 50
Aug. 4—	To warrant.....	3,005 46
Oct. 2—	To warrant.....	2,182 27
1889—Jan. 26—	To warrant.....	3,108 94
Mar. 2—	Error in crediting voucher No. 1211.....	20
Mar. 15—	To warrant.....	2,191 92
Apr. 25—	To warrant.....	2,586 00

\$13,115 29

CREDITS FOR THE FORTIETH FISCAL YEAR.

Date.	To WHOM PAID.	No. of Voucher	Dr.	Cr.
1888,			\$13,115 29	
July 1..	R. D. Stephens	1178		\$5 00
Aug. 4..	Sunset Telephone and Telegraph Co.....	1179		18 75
Aug. 4..	Mrs. M. E. Weaver	1180		260 00
Aug. 9..	McKenney Directory Co.	1181		4 00
Aug. 4..	Fred. Kolliker	1182		1 25
Aug. 4..	C. E. Spencer	1183		7 80
Aug. 21..	American Journal Insanity.....	1184		5 00
Aug. 9..	W. S. Duncombe & Co.	1185		7 00
Aug. 9..	"Argonaut"	1186		4 00
Aug. 4..	T. H. Wallis	1187		2 00
Aug. 4..	F. L. White	1188		3 25
Aug. 20..	L. S. Metcalf	1189		7 50
Aug. 4..	H. S. Crocker	1190		2 00
Aug. 9..	Bancroft-Whitney Co.	1191		173 60
Aug. 21..	Massachusetts Historical Society	1192		3 00
Aug. 21..	Magazine American History	1193		12 50
Aug. 8..	Hartwell & Stalker	1194		3 00
Aug. 9..	D. Appleton & Co.	1195		12 00
Aug. 21..	William Wood & Co.	1196		12 50
Aug. 4..	William Doxey	1197		45 00
Aug. 4..	R. L. Polk & Co.	1198		14 00
Aug. 9..	Dewey & Co.	1199		8 00
Aug. 9..	Bancroft Bros. & Co.	1200		101 50
Aug. 4..	J. Laracy	1201		4 50
Aug. 4..	C. Heisen, Jr.	1202		50 00
Aug. 4..	History Co.	1203		100 00
Aug. 4..	Union Ice Co.	1204		8 30
Aug. 4..	The Bancroft Co.	1205		2,109 01
Aug. 4..	T. H. Wallis	1206		20 00
Aug. 3..	I. S. Belcher	1207		5 00
Aug. 14..	Ohio Archaeological and Historical Society	1208		1 00
Aug. 16..	H. K. Wallace & Co.	1209		25
July 18..	A. S. Hopkins & Bros.	1210		25
July 18..	Western Publishing Co.	1211		20
Aug. 22..	Southern Pacific Railroad Co.	1212		3 45
Sept. 28..	Western Union Telegraph Co.	1213		1 25
Aug. 8..	D. O. Mills & Co.	1214		
Oct. 3..	Mrs. M. Southworth	1215		260 00
Oct. 3..	C. Heisen, Jr.	1216		100 00
Oct. 3..	Sunset Telegraph and Telephone Co.	1217		19 50
Oct. 3..	The Bancroft Co.	1218		250 98
Oct. 3..	J. Dewey Co.	1219		74 25
Oct. 3..	Wm. Doxey	1220		683 00
Oct. 3..	The History Co.	1221		111 25
Oct. 3..	J. A. Hofmann	1222		29 03
Oct. 3..	Bancroft-Whitney Co.	1223		116 75
Oct. 8..	A. S. Clarke	1224		58 76
Oct. 8..	Medico-Legal Journal Association	1225		6 00
Oct. 15..	W. Doan	1226		3 90
Oct. 9..	G. P. Putnam's Sons	1227		5 00
Oct. 9..	W. H. Lowdermilk & Co.	1228		18 00
Oct. 8..	C. L. Woodward	1229		2 00
Oct. 11..	F. E. Galloupe	1230		2 00
Oct. 3..	Dewey & Co.	1231		7 70
Oct. 9..	Henry N. Copp	1232		3 00
Oct. 3..	D. O. Herndon	1233		2 75
	Amount carried forward		\$13,115 29	\$4,769 73

REPORT OF TRUSTEES OF STATE LIBRARY.

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CREDITS FOR THE FORTIETH FISCAL YEAR—Continued.

Date.	To WHOM PAID.	No. of Voucher	Dr.	Cr.
1888.	Amount brought forward		\$13,115 29	\$4,769 73
Oct. 3.	C. H. Krebs & Co.	1234		73 25
Oct. 9.	Library Bureau	1235		25 60
Oct. 3.	F. H. Wing	1236		16 50
Oct. 3.	Bancroft Bros. & Co.	1237		64 00
Oct. 3.	Union Ice Co.	1238		4 55
Oct. 3.	J. B. Davis	1239		16 25
Oct. 3.	Holbrook, Merrill & Stetson	1240		20 00
Oct. 3.	Sprague & Elliot	1241		168 75
Oct. 3.	Sacramento Transfer Co.	1242		3 50
Oct. 3.	R. D. Stephens	1243		30 00
Oct. 3.	T. H. Wallis	1244		2 00
Oct. 3.	I. S. Belcher	1245		4 00
Oct. 3.	The Dewing Company	1246		
Oct. 7.	John H. Rush	1247		7 50
Oct. 17.	Southern Pacific Railroad Co.	1248		9 44
Dec. 12.				
1889.				
Feb. 15.	Grangers' Store	1249		1 60
1888.				
Dec. 31.	Western Union Telegraph Co.	1250		2 55
1889.				
Feb. 15.	Publishers' Weekly	1251		19
Feb. 15.	Central Law Journal	1252		60
Jan. 26.	May E. Southworth	1253		390 00
Jan. 26.	Sunset Telephone Co.	1254		24 00
Jan. 25.	Bancroft-Whitney Co.	1255		336 25
Feb. 2.	Chas. C. Soule	1256		323 08
Jan. 25.	Bancroft Bros. & Co.	1257		237 25
Jan. 28.	Bancroft Co.	1258		164 75
Jan. 28.	History Co.	1259		67 50
Jan. 28.	J. Dewing Co.	1260		155 75
Jan. 28.	Jos. A. Hofmann	1261		25 46
Jan. 28.	D. Appleton & Co.	1262		6 00
Feb. 1.	A. L. Bancroft & Co.	1263		5 00
Jan. 28.	Charles S. Greene	1264		198 65
Jan. 28.	A. Waldteufel	1265		2 00
Jan. 28.	Golden West Publishing Co.	1266		3 00
Jan. 28.	Ayers & Lynch	1267		8 00
Jan. 28.	E. C. Hughes	1268		3 00
Jan. 31.	San Francisco Call Co.	1269		11 70
Jan. 28.	F. L. White	1270		3 25
Jan. 28.	Sacramento Publishing Co.	1271		7 80
Jan. 31.	Chicago Legal News Co.	1272		2 20
Feb. 1.	Lawyers' Cooperative Publishing Co.	1273		5 00
Feb. 1.	Reporter Publishing Co.	1274		5 00
Jan. 31.	West Publishing Co.	1275		16 45
Feb. 1.	William Wood & Co.	1276		12 50
Feb. 2.	G. P. Putnam's Sons	1277		12 00
Feb. 2.	A. S. Clark	1278		12 84
Feb. 2.	Library Bureau	1279		127 00
Feb. 1.	George S. Davis	1280		15 00
Feb. 1.	Paul L. Ford	1281		5 25
Feb. 2.	J. H. Hickox	1282		5 00
Feb. 2.	Astor Library	1283		41 56
Jan. 31.	W. H. Ragan (Amer. Hor. Soc.)	1284		6 00
Feb. 2.	Library Notes	1285		1 00
Feb. 2.	Francis E. Galloupe	1286		2 00
Feb. 2.	Houghton, Mifflin & Co.	1287		16 98
Feb. 2.	Massachusetts Historical Society	1288		2 69
Jan. 28.	Postal Index Co.	1289		1 50
Jan. 26.	Union Ice Co.	1290		16 60
Jan. 26.	Samuel Jelly	1291		2 50
Jan. 26.	Holbrook, Merrill & Stetson	1292		15 00
Jan. 26.	Sacramento Paper Mill	1293		1 08
	Amount carried forward		\$13,115 29	\$7,517 60

CREDITS FOR THE FORTIETH FISCAL YEAR—Continued.

Date.	To Whom Paid.	No. of Voucher	Dr.	Cr.
1889.	Amount brought forward		\$13,115 29	\$7,517 60
Jan. 26.	C. F. Weber & Co.	1294		90 00
Jan. 26.	H. W. Rivett	1295		112 00
Jan. 26.	A. S. Hopkins & Bro.	1296		5 90
Jan. 28.	O. C. Chambers	1297		1 50
Jan. 26.	R. D. Stephens	1298		30 00
Jan. 26.	C. Heisen, Jr.	1299		161 67
Jan. 26.	J. H. Rust	1300		87 75
Jan. 26.	"Political Record"	1301		5 00
Jan. 26.	Smith & Miner	1302		56 88
Jan. 28.	George McKenna	1303		6 00
Jan. 26.	Jasper Drake	1304		38 25
Jan. 31.	The Mas-Sin-Na-Gan Co.	1305		6 00
Jan. 28.	San José "Mercury"	1306		6 00
Jan. 25.	C. A. Sawtelle	1307		9 45
Jan. 25.	T. H. Wallis	1308		14 00
Jan. 25.	William Doxey	1309		180 95
Jan. 20.	D. O. Mills & Co.	1310		1 65
Feb. 14.	Western Union Telegraph Co.	1311		3 39
Feb. 8.	Bancroft Bros. & Co.	1312		15 00
Feb. 14.	P. Byrnes	1313		7 00
Feb. 19.	San Francisco "City Argus"	1314		4 00
Mar. 15.	Mrs. M. E. Southworth	1315		260 00
Mar. 15.	Sunset Telephone Co.	1316		18 25
Mar. 15.	Western Union Telegraph Co.	1317		4 76
Mar. 15.	A. L. Bancroft & Co.	1318		37 00
Mar. 15.	Bancroft-Whitney Co.	1319		201 85
Mar. 15.	Bancroft Company	1320		299 18
Mar. 15.	Bancroft Bros. & Co.	1321		52 50
Mar. 15.	Wm. Doxey	1322		150 75
Mar. 15.	Tauzy, Carvajal & Co.	1323		601 80
Mar. 15.	Chas. S. Green	1324		160 60
Mar. 15.	G. H. Jones	1325		7 75
Mar. 15.	H. H. Snow	1326		11 70
Mar. 15.	"Evening Post" Publishing Co.	1327		10 30
Mar. 15.	Ayers & Lynch	1328		8 00
Mar. 15.	"The Occident"	1329		1 50
Mar. 15.	San Francisco "Wasp"	1330		10 00
Mar. 15.	C. C. Soule	1331		65 50
Mar. 15.	Carswell & Co.	1332		30 96
Mar. 15.	G. P. Putnam's Sons	1333		12 00
Mar. 15.	F. A. Davis	1334		20 00
Mar. 15.	R. R. Bowker (Publishers' Weekly)	1335		11 00
Mar. 15.	Hubbell Legal Directory Co.	1336		5 00
Mar. 15.	Fred. Kolliker	1337		7 20
Mar. 15.	Wm. McLaughton	1338		4 90
Mar. 15.	T. H. Wallis	1339		
Mar. 15.	T. H. Wallis	1340		10 00
Mar. 15.	C. Heisen, Jr.	1341		50 00
Mar. 15.	R. D. Stephens	1342		25 00
Mar. 15.	Union Ice Co.	1343		8 00
Mar. 15.	C. H. Krebs & Co.	1344		19 15
Mar. 18.	D. O. Mills & Co.	1346		40
April 24.	M. E. Southworth	1347		130 00
April 24.	T. H. Wallis	1348		300 00
April 24.	Tauzy, Carvajal & Co.	1349		101 20
April 24.	Bancroft-Whitney Co.	1350		157 75
April 24.	Callaghan & Co.	1351		271 25
April 24.	T. L. Cole	1352		862 00
April 24.	Bancroft Bros. & Co.	1353		146 00
April 24.	A. L. Bancroft & Co.	1354		4 50
April 24.	C. S. Houghton	1355		156 50
April 24.	A. C. Clark	1356		12 58
April 24.	D. Appleton & Co.	1357		6 00
April 24.	L. P. McCarty	1358		8 00
April 24.	Jas. E. Grant	1359		5 00
April 24.	W. S. Church	1360		5 00
April 24.	Sunset Telephone and Telegraph Co.	1361		26 20
	Amount carried forward		\$13,115 29	\$12,657 02

CREDITS FOR THE FORTIETH FISCAL YEAR—Continued.

Date.	TO WHOM PAID.	No. of Voucher	Dr.	Cr.
1889.	Amount brought forward		\$13,115 29	\$12,657 02
April 24.	C. Heisen, Jr.	1362		73 00
April 24.	F. F. Freeman	1363		15 00
April 24.	H. Zollver	1364		50 00
April 24.	Sprague & Elliott	1365		180 52
April 24.	T. H. Wallis	1366		10 00
April 24.	Wm. Doxey	1367		65 50
April 25.	D. O. Mills & Co.	1367½		2 50
June 30.	To cash on deposit N. B., D. O. Mills & Co.			11 75
June 30.	To cash on hand			50 00
			\$13,115 29	\$13,115 29

DEBITS FOR THE FORTY-FIRST FISCAL YEAR.

1889—July 1—	To balance on hand July 1, 1889		\$61 75
July 26—	To warrant		6,277 40
July 26—	To warrant		100 00
Aug. 30—	To warrant		2,236 21
Oct. 8—	To warrant		3,433 21
Nov. 15—	To warrant		2,550 31
Dec. 14—	To warrant		4,386 18
1890—Feb. 7—	To warrant		5,885 01
Feb. 28—	To warrant		10 09
Feb. 28—	To warrant		5,578 05
Mar. 1—	To warrant		72 00
			\$30,590 21

CREDITS FOR THE FORTY-FIRST FISCAL YEAR.

Date.	TO WHOM PAID.	No. of Voucher	Dr.	Cr.
1889.			\$30,590 21	
July 26.	M. E. Southworth	1368		\$390 00
July 26.	J. A. Galland	1369		64 00
Aug. 16.	MacMillan & Co.	1370		575 00
Aug. 12.	C. C. Soule	1371		2,067 20
July 27.	The Bancroft Co.	1372		654 69
July 22.	Bancroft-Whitney Co.	1373		588 90
July 26.	Bancroft Bros.	1374		119 50
July 26.	Wm. Doxey	1375		204 55
Aug. 6.	Carswell & Co.	1376		88 35
July 26.	J. Dewing Co.	1377		259 50
Aug. 5.	Callaghan & Co.	1378		191 60
Aug. 5.	F. A. Davis	1379		20 00
July 26.	Smith & Muir	1380		56 77
July 29.	Frank D. Ryan	1381		6 00
July 26.	T. H. Wallis	1382		16 00
July 29.	"Record-Union"	1383		15 60
July 29.	F. C. Hyde	1384		10 00
July 29.	E. Lyon & Co.	1385		2 00
July 31.	Union Ice Co.	1386		29 00
July 29.	San Francisco "Examiner"	1387		3 65
July 29.	W. Doan	1388		3 90
July 29.	H. H. Snow	1389		14 10
July 29.	H. S. Crocker & Co.	1390		6 70
July 29.	C. H. Krebs & Co.	1391		112 75
July 31.	G. R. Armstrong	1392		4 50
Aug. 7.	Publishers' Weekly	1393		3 18
Aug. 7.	Magazine of American History	1394		5 00
Aug. 7.	Southern Historical Society	1395		3 00
Aug. 7.	William Cushing	1396		5 00
Aug. 7.	A. S. Clark	1397		3 05
Aug. 7.	G. P. Putnam's Sons	1398		5 00
Aug. 7.	Massachusetts Historical Society	1399		3 25
	Amount carried forward		\$30,590 21	\$5,531 74

CREDITS FOR THE FORTY-FIRST FISCAL YEAR—Continued.

Date.	To WHOM PAID.	No. of Voucher	Dr.	Cr.
1889.	Amount brought forward		\$30,591 21	\$5,531 74
Aug. 6.	West Publishing Co.	1400		42 45
July 31.	J. A. Hofmann	1401		3 60
July 31.	D. Bruce	1402		3 00
July 31.	D. Appleton & Co.	1403		6 00
July 27.	A. L. Bancroft & Co.	1404		63 00
July 31.	C. S. Green	1405		86 15
July 27.	E. Boehme	1406		5 00
July 31.	E. Murphy	1407		10 00
July 29.	R. D. Stephens	1408		30 00
Aug. 6.	J. H. Hickox	1409		5 00
July 31.	Postal Index Co.	1410		1 50
July 29.	Western Union Telegraph Co.	1411		16 89
Aug. 2.	"Argonaut" Publishing Co.	1412		4 00
July 31.	History Co.	1413		5 50
July 29.	Sunset Telephone Co.	1414		24 15
July 29.	Wells, Fargo & Co.'s Express	1415		33 35
July 27.	Van Horn & Turner	1416		115 00
July 31.	Dewey & Co.	1417		6 00
July 31.	J. G. Davis	1418		237 11
July 31.	O'Niel Bros.	1419		12 00
July 26.	Wm. Doxey	1420		36 00
July 30.	T. H. Wallis	1421		100 00
Aug. 30.	M. E. Southworth	1422		260 00
Aug. 30.	The Bancroft Co.	1423		2 50
Aug. 31.	Bancroft-Whitney Co.	1424		121 25
Aug. 31.	Bancroft Bros. & Co.	1425		455 25
Aug. 31.	Wm. Doxey	1426		875 50
Sept. 18.	Callaghan & Co.	1427		5 50
Sept. 2.	J. Dewing Co.	1428		30 00
Sept. 19.	Geo. S. Davis	1429		5 00
Sept. 7.	H. L. Hutchinson	1430		25 00
Sept. 7.	Dewey & Co.	1431		3 00
Sept. 7.	A. S. Clark	1432		1 52
Sept. 7.	F. M. Husted	1433		8 00
Sept. 7.	C. S. Green	1434		15 25
Sept. 2.	Holbrook, Merrill & Stetson	1435		1 50
Sept. 2.	W. H. Corran	1436		5 00
Sept. 2.	R. D. Stephens	1437		12 00
Sept. 2.	Wells, Fargo & Co.	1438		9 50
Sept. 2.	Frank H. Wing	1439		2 00
Sept. 2.	W. H. Lowdermilk	1440		13 19
Sept. 2.	Theo. W. Schwamb	1441		14 00
Sept. 1.	T. H. Wallis	1442		10 00
Aug. 31.	Sprague & Elliott	1443		351 00
Sept. 2.	E. W. Gould	1444		3 25
Oct. 7.	F. L. White	1445		6 50
Oct. 9.	Bancroft-Whitney Co.	1446		849 50
Oct. 8.	The Bancroft Co.	1447		578 03
Oct. 8.	Bancroft Bros.	1448		361 55
Oct. 8.	Boston Book Co. (C. C. Soule)	1449		885 00
Oct. 8.	A. S. Clark	1450		25 89
Oct. 9.	C. S. Green	1451		83 45
Oct. 9.	Isidor Alexander	1452		63 00
Oct. 9.	Ella A. Burke	1453		81 00
Oct. 9.	Mrs. L. Dickman	1454		66 00
Oct. 9.	Paul Maslin	1455		60 00
Oct. 9.	M. E. Southworth	1456		130 00
Oct. 9.	H. H. Snow	1457		3 90
Oct. 9.	W. Doan	1458		3 90
Oct. 9.	R. D. Stephens	1459		5 00
Oct. 9.	E. De Forest	1460		25 50
Oct. 10.	J. Dewing Co.	1461		9 75
Oct. 30.	Chicago Legal News Co.	1462		2 20
Oct. 14.	Publishers' Weekly	1463		2 30
Oct. 8.	Wells, Fargo & Co.	1464		25 45
Oct. 8.	Paul L. Ford	1465		8 34
Oct. 8.	Sunset Telephone Co.	1466		28 60
	Amount carried forward		\$30,591 21	\$11,907 61

CREDITS FOR THE FORTY-FIRST FISCAL YEAR—Continued.

Date.	To WHOM PAID.	No. of Voucher	Dr.	Cr.
1889.	Amount brought forward		\$30,591 21	\$11,907 61
Oct. 8.	Union Ice Co.	1467		12 60
Oct. 9.	W. S. Duncombe & Co.	1468		7 00
Oct. 8.	T. H. Wallis	1469		2 00
Oct. 9.	William Doxey	1470		111 00
Oct. 9.	H. N. Wright	1471		2 25
Nov. 30.	Bancroft-Whitney Co.	1472		72 55
Nov. 22.	The Bancroft Co.	1473		60 88
Nov. 18.	Bancroft Bros.	1474		388 75
Nov. 18.	Boston Book Co.	1475		454 13
Nov. 18.	A. S. Clark	1476		23 77
Nov. 18.	Charles A. Green	1477		41 05
Nov. 18.	Mrs. M. E. Southworth	1478		130 00
Nov. 18.	R. D. Stephens	1479		10 00
Nov. 16.	William Doxey	1480		809 25
Nov. 16.	Peabody Institute Library	1481		8 56
Nov. 21.	W. H. Lowdermilk	1482		4 00
Nov. 18.	Frank H. Wing	1483		4 00
Nov. 21.	Howard, Lockwood & Co.	1484		2 00
Nov. 18.	Wells, Fargo & Co.	1485		17 85
Nov. 19.	The J. Dewing Co.	1486		6 00
Nov. 18.	Western Union Telegraph Co.	1487		5 57
Nov. 18.	West Publishing Co.	1488		15 00
Nov. 18.	Medico-Legal Association	1489		9 00
Nov. 18.	Union Ice Co.	1490		6 30
Nov. 18.	G. P. Putnam's Sons	1491		5 00
Nov. 22.	American Journal Insanity	1492		2 00
Nov. 18.	Sunset Telephone and Telegraph Co.	1493		5 00
Nov. 18.	F. D. Ryan	1494		11 50
Nov. 15.	T. H. Wallis	1495		10 00
Nov. 16.	G. G. Pickett	1496		1 00
Nov. 18.	J. G. Davis	1497		80 60
Nov. 18.	J. A. Hofmann	1498		3 60
Nov. 16.	E. T. Hampton	1499		7 00
Nov. 16.	Wm. Doxey	1500		175 95
Nov. 22.	The Bancroft Co.	1501		175 00
Nov. 15.	A. C. Freeman	1502		5 00
Dec. 14.	Bancroft-Whitney Co.	1503		132 15
Dec. 14.	Bancroft Bros. & Co.	1504		15 00
Dec. 26.	Boston Book Co.	1505		382 22
Dec. 13.	Wm. Doxey	1506		2,471 30
Dec. 14.	Mrs. M. E. Southworth	1507		130 00
Dec. 14.	R. D. Stephens	1508		15 00
Dec. 14.	S. F. Daily "Examiner"	1509		3 90
Dec. 26.	Geo. S. Davis	1510		10 00
Dec. 20.	Western Union Telegraph Co.	1511		5 68
Dec. 20.	Wells, Fargo & Co.	1512		21 00
Dec. 24.	Thos. G. Newman & Son	1513		51 00
Dec. 20.	Sunset Telephone and Telegraph Co.	1514		4 05
Dec. 20.	F. D. Ryan	1515		6 00
Dec. 2.	Gebbie & Co.	1516		32 00
Dec. 13.	Wm. Doxey	1517		1,065 90
Dec. 14.	W. J. Hardy	1518		7 50
Dec. 13.	M. Gardner	1519		10 00
Dec. 13.	T. H. Wallis	1520		10 00
Dec. 21.	J. Dewing Co.	1521		13 50
Dec. 21.	National Bank of D. O. Mills & Co.	1522		11 50
Mar. 31.	Pacific Postal Telegraph Co.	1523		1 07
June 1.	Pacific Postal Telegraph Co.	1524		1 64
Nov. 1.	Pacific Postal Telegraph Co.	1525		50
Mar. 25.	H. J. Carr	1526		2 10
1890.				
Feb. 10.	Southern Pacific Railroad Co.	1527		31 79
1889.				
Dec. 20.	F. J. Lewis	1528		1 00
Dec. 1.	F. L. White	1529		5 00
	Amount carried forward		\$30,591 21	\$19,037 45

CREDITS FOR THE FORTY-FIRST FISCAL YEAR—Continued.

Date.	To WHOM PAID.	No. of Voucher	Dr.	Cr.
1890.	Amount brought forward		\$30,591 21	\$19,037 45
Jan. 1.	J. A. Martin	1530		3 75
1889.				
Aug. 1.	Huntington, Hopkins & Co.	1531		2 45
1890.				
Feb. 10.	Bancroft-Whitney Co.	1532		5 00
Feb. 10.	Bancroft Bros.	1533		348 18
Feb. 13.	Boston Book Co.	1534		59 31
Feb. 8.	Wm. Doxey	1535		2,028 40
Feb. 8.	M. E. Southworth	1536		260 00
Feb. 8.	R. D. Stephens	1537		5 00
Feb. 8.	Western Union Telegraph Co.	1538		24 83
Feb. 8.	Postal Telegraph Co.	1539		1 40
Feb. 8.	Southern Pacific Railroad Co.	1540		11 00
Feb. 8.	Wells, Fargo & Co.	1541		42 95
Feb. 8.	Sunset Telephone and Telegraph Co.	1542		22 00
Feb. 10.	History Co.	1543		5 50
Feb. 10.	A. L. Bancroft & Co.	1544		9 00
Feb. 10.	Gebbie & Co.	1545		147 75
Feb. 10.	J. Dewing & Co.	1546		117 00
Feb. 8.	Wm. Doxey	1547		566 60
Feb. 8.	W. J. Hardy	1548		50 00
Feb. 8.	E. Boehme	1549		17 50
Feb. 10.	Bancroft Bros.	1550		1,474 04
Feb. 19.	W. D. Walkup	1551		46 25
Feb. 8.	T. H. Wallis	1552		10 00
Feb. 8.	J. McCulloch	1553		4 50
Feb. 13.	Carswell & Co.	1554		35 54
Feb. 8.	J. S. Williams	1555		3 00
Feb. 13.	G. P. Putnam's Sons	1556		10 00
Feb. 13.	Wm. Cushing	1557		5 00
Feb. 14.	Henry N. Copp	1558		4 70
Feb. 10.	Chas. S. Green	1559		256 30
Feb. 26.	F. L. White	1560		4 25
Feb. 10.	San Francisco "Wasp"	1561		5 00
Feb. 13.	Wm. Wood & Co.	1562		11 50
Feb. 10.	San José "Mercury"	1563		6 00
Feb. 13.	West Publishing Co.	1564		18 00
Feb. 13.	Publisher's Weekly (R. R. Bowker)	1565		5 00
Feb. 10.	Occident Stock Co.	1566		1 50
Feb. 13.	Howard, Lockwood & Co.	1567		2 00
Feb. 13.	Mrs. Laura De Force Gordon	1568		5 00
Feb. 8.	C. H. Krebs & Co.	1569		28 00
Feb. 8.	Union Ice Co.	1570		13 20
Feb. 8.	Sacramento Transfer Co.	1571		13 20
Feb. 10.	Geo. W. Reed	1572		7 40
Feb. 8.	Frank F. Freeman	1573		15 00
Feb. 8.	J. M. Page	1574		39 96
Feb. 10.	D. Appleton & Co.	1575		90 55
Feb. 8.	Ed. H. Balze	1576		2 00
Mar. 11.	A. L. A. (H. J. Carr)	1577		2 10
Feb. 13.	Hubbell Legal Directory Co.	1578		5 00
Feb. 7.	I. S. Belcher	1579		10 00
Feb. 8.	Marion Davis	1580		3 00
Feb. 8.	O'Neil Bros.	1581		7 50
Feb. 8.	A. C. Freeman	1582		10 00
Mar. 3.	L. K. Stroumce & Co.	1583		75
Mar. 3.	Weed, Parsons & Co.	1584		20
Feb. 26.	John Henry Rust	1585		16 00
Feb. 23.	Bancroft-Whitney Co.	1586		167 75
Mar. 1.	Bancroft Bros.	1587		653 58
Mar. 1.	Boston Book Co.	1588		980 18
Mar. 1.	Wm. Doxey	1589		1,408 50
Mar. 1.	M. E. Southworth	1590		130 00
Mar. 11.	R. D. Stephens	1591		15 00
	Amount carried forward		\$30,591 21	\$28,281 52

CREDITS FOR THE FORTY-FIRST FISCAL YEAR—Continued.

Date.	To WHOM PAID.	No. of Voucher	Dr.	Cr.
1890.	Amount brought forward		\$30,591 21	\$28,281 52
Mar. 1.	Western Union Telegraph Co.	1592		13 77
Mar. 1.	Gebbie & Co.	1593		78 50
Mar. 1.	J. Dewing Co.	1594		20 75
Mar. 1.	Wm. Doxey	1595		907 25
Mar. 1.	W. J. Hardy	1596		72 00
Mar. 1.	E. Boehme	1597		72 00
Mar. 1.	T. H. Wallis	1598		5 00
Mar. 1.	Union Ice Co.	1599		12 90
Mar. 1.	A. C. Freeman	1600		10 00
Mar. 1.	J. M. Page	1601		100 00
Mar. 1.	J. J. Laracy	1602		3 00
Mar. 1.	D. Appleton & Co.	1603		185 00
Mar. 1.	I. S. Belcher	1604		10 00
Mar. 1.	H. H. Moore	1605		254 00
Mar. 1.	Crocker & Co.	1606		4 95
Mar. 1.	A. Flohr	1607		26 50
Mar. 3.	Golden West Publishing Co.	1608		1 50
Mar. 3.	W. E. Doan	1609		3 90
Mar. 3.	American Journal Insanity	1610		5 00
Mar. 3.	Publishers' Weekly	1611		3 00
Mar. 3.	C. C. Hine	1612		20 00
Mar. 3.	J. McGuire	1613		3 00
Mar. 3.	E. Roth	1614		1 50
Mar. 1.	G. G. Pickett	1615		1 50
Mar. 1.	F. H. Thomas & Co.	1616		2 34
Mar. 1.	Chas. B. Wilson	1617		1 00
Mar. 1.	T. H. Wallis	1618		15 00
Mar. 1.	H. W. Rivett	1619		187 30
Mar. 1.	J. G. Davis	1620		150 63
Mar. 1.	A. J. Muir	1621		34 75
Mar. 1.	Sacramento Transfer Co.	1622		17 00
Feb. 28.	Reimbursement of postage and express- age account.	1623		10 09
Mar. 1.	W. S. Green	1624		15 00
Mar. 1.	H. E. McCune	1625		10 00
Mar. 1.	E. O. Miller	1626		25 00
Mar. 1.	F. F. Strother	1627		17 00
Mar. 1.	R. D. Stephens	1628		5 00
Feb. 28.	Western Union Telegraph Co.	1629		2 16
Mar. 1.	D. O. Mills & Co.	1630		3 90
April 3.	On deposit National Bank of D. O. Mills & Co.			9 88
	To balance due T. H. Wallis.		22 38	
			\$30,612 59	\$30,612 59

STATEMENT

Showing the Condition of the State Library Fund, July 1, 1888, to March 11, 1890.

Dr.			Cr.		
1888.			1889.		
July 1...	To balance forwarded	\$27,831 46	June 30...	By warrants issued, fortieth fiscal year	\$13,074 59
1889.			1890.		
July 1...	To fees from Secretary of State, for fortieth fiscal year	20,166 95	April ...	By warrants issued, forty-first fiscal year, ending April 6th	30,528 46
1890.			April ...	By balance on hand	19,972 91
April 6...	To fees from Secretary of State, forty- first fiscal year, ending April 6th	15,577 55			
	Total	\$63,575 96		Total	\$63,575 96

REPORT OF TRUSTEES OF STATE LIBRARY.

STATEMENT

*Of Expenditures made from the Appropriation for Postage and Expressage of the State Library,
July 1, 1888, to March 11, 1890.*

Dr.			Cr.		
1888.			1888.		
July 1	To appropriation for the fortieth fiscal year -----	\$200 00	Nov. 1..	Wells, Fargo & Co.	\$18 30
			Nov. 1..	Sacramento Transfer Co..	22 50
			Nov. 13..	Wells, Fargo & Co.	5 30
			1889.		
			Jan. 24..	Sacramento Transfer Co..	26 50
			Jan. 24..	Wells, Fargo & Co.	5 50
			Feb. 7..	Sacramento Transfer Co..	5 50
			Apr. 13..	Sacramento Transfer Co..	17 50
			May 11..	Wells, Fargo & Co.	55 80
			May 14..	Western Union Tele- graph Co.	10 94
			June 1..	Sacramento Transfer Co..	10 00
			June 7..	Sacramento Transfer Co..	3 70
			June 18..	Sacramento Transfer Co..	7 50
			July 22..	Sacramento Transfer Co..	9 00
				By balance -----	1 88
1889.		\$200 00			
July	To appropriation for the forty-first fis- cal year -----	\$200 00	1889.		\$200 00
			July 19..	Southern Pacific Rail- road Co.	\$52 34
			July 23..	Southern Pacific Rail- road Co.	21 67
			Aug. 5..	Western Union Tele- graph Co.	5 49
			Aug. 6..	Southern Pacific Rail- road Co.	23 20
			Aug. 16..	Sacramento Transfer Co..	13 00
			Sept. 5..	Southern Pacific Rail- road Co.	28 70
			Sept. 24..	T. H. Wallis	13 32
			Oct. 9..	Sacramento Transfer Co..	18 50
			Dec. 4..	Sacramento Transfer Co..	8 00
1890.			Oct. 16..	Western Union Tele- graph Co.	15 37
Feb. 28	From Library Fund..	10 09	Oct. 31..	Sacramento Transfer Co..	10 50
		\$210 09			\$210 09

LIBRARIAN'S REPORT

FOR THE FORTY-FIRST FISCAL YEAR, FROM APRIL 7 TO JUNE 30, 1890.

CALIFORNIA STATE LIBRARY, OFFICE OF THE LIBRARIAN, }
SACRAMENTO, CAL., July 31, 1890. }

To the honorable Board of Trustees of the California State Library:

GENTLEMEN: I have the honor to submit the following report of the financial transactions of this department during the forty-first fiscal year, from April 7 to June 30, 1890, both dates inclusive.

I assumed the duties of Librarian of the California State Library on April 7, 1890, and found \$19,972 91 in the State Treasury to the credit of the State Library Fund. I also found \$9 88 in the National Bank of D. O. Mills & Co., a balance due the California State Library, as shown by the cash book in this office.

My predecessor, T. H. Wallis, transferred to me unpaid claims against the State Library to the amount of \$8,270 99, which have been paid by me, with the following exceptions:

Callaghan & Co.....	\$111 75
The F. H. Thomas Law Book Co.....	297 50
T. L. Cole.....	511 00
C. S. Houghton.....	98 20
Total.....	\$1,018 45

This amount deducted from the amount of unpaid bills, leaves a balance of \$7,252 54, which has been allowed and paid. In addition to this amount, claims against the California State Library, contracted by ex-Librarian Wallis, have been received and paid to the amount of \$721 32, making a total of \$7,973 86 in bills contracted by my predecessor and paid by me.

Had ex-Librarian Wallis paid the claims in his possession at the time he surrendered his office to me, which amounted to \$8,270 99, and those contracted by him and received and paid during my incumbency, amounting to \$721 32, the amount of money in the State Treasury to the credit of the State Library Fund on April 7, 1890, would have been \$10,980 60, instead of \$19,972 91, as shown by the Controller's books.

The accession register received from my predecessor shows seventy-nine thousand nine hundred and sixty-six volumes in the Library on April 7, 1890, but after a careful count, I find that I received only seventy-three thousand five hundred and ninety-seven volumes. The difference in the number of volumes in the Library, as shown by the accession register, and that actually received by me on April 7, 1890, is six thousand three hundred and sixty-nine.

The catalogues and cards of the General and Law Departments have been carefully checked and compared with the books, maps, periodicals, etc., received from my predecessor, and I find the following list of books entered therein which cannot be found in the Library:

LIST OF BOOKS NOT FOUND.

GENERAL DEPARTMENT.

- AMERICAN almanac. 1846.
 ARKANSAS. Board of Health. Report, 1882.
 BOILEAU, J. T. Traverse tables, 1876. (Duplicate.)
 BALZAC, H. de. Modeste Mignon. 1888.
 BRITISH possessions route. [n. t. p.]
 CLARK, R. & Co. Digest of law publications.
 CHRONICLES of the crusades. 1882.
 COMINES, P. de. Memoirs, v. 2. Lond., 1886.
 CONNECTICUT. Secretary of State. Registration report, 1858.
 — State Librarian Report, 1858.
 COWPERTHWAIT, A. C. Insanity. Phil., 1876.
 CUMMINGS, E. M. Companion to St. Paul's cathedral.
 DAUDET, A. Sappho. Paris, 1887.
 DAVIES, C. Modern whist. 1886.
 DEMPSEY, G. D. Machinery of the nineteenth century. 2 v.
 DOY, J. Narrative. N. Y., 1860.
 FONTAINE, H. Electric lighting. 1879.
 FRANÇOIS, A. Nouveau manuel du negociant de vins. Paris, 1864.
 GREAT battles of the British army.
 GREENAWAY, K. Language of flowers.
 HADLEY, A. T. Railway transportation. N. Y., 1886.
 HAMERLING, R. Aspasia. 1885. 2 v.
 HANSARD'S debates, v. 270.
 HARTE, F. B. Phyllis of the Sierras. 1888.
 HAWTHORNE, N. Mosses from an old manse.
 HULETT, T. G. Guide to Niagara. 1845.
 IDAHO. Journal of the House. 1887.
 ILLINOIS. Central Hospital for the Insane. Report, 1875-76.
 — General Assembly. Report of Special Committee on Labor. 1878.
 — Institution for the Education of the Blind. 14th report.
 — Institution for the Education of the Deaf and Dumb. 18th report, 1875-76.
 — Soldiers' Orphans' Homes. 4th report, 1875-76.
 — Southern Hospital for the Insane. 2d report, 1876-77.
 — Southern Reform School. 4th report, 1875-76.
 JOHNSON, J. B. Manual of topographical surveying. 1885.
 JONES, S. P. Sermons and sayings. 1886.
 KEYES, E. L. Venereal diseases. 1880.
 LAWES, J. B., and others. Soil of the farm.
 LEIGHTON, R. F. Harvard examination papers. 1886.
 MANNING, J. R. Illustrated stock doctor. 1882.
 MASSACHUSETTS. Board of State Charities. 10th annual report.
 — State Prison. Annual report, 1861.
 MICHIGAN. Fire Relief Commission. Report, 1882.
 MONEOE, C. E. Index to literature of explosives. Balt., 1886.
 OHIO. Board of Commissioners for Reform Schools. Reports, 1871-73, 1875, 1877.
 — Penitentiary. Report, 1877.
 PALEY, W. Natural theology. 1849.
 PARTON, Mrs. (Fanny Fern). Ruth Hall. 1855.
 PENNSYLVANIA. Board of Commissioners of Public Charities. 19th report, 1888.
 — Superintendent of Schools. School Laws. 1857.
 PYNE, S. Sermon on the death of Z. Taylor. 1850.
 RAMÉ, L. de la (Ouida). Puck. 1873.
 RICARDO, D. Works. 1871.
 RYAN, M. Philosophy of marriage. Phil., 1870.
 SCOTT, Sir W. Lady of the lake. 1863.
 TOLSTOI, L. N. My religion. 1885.
 — The two pilgrims. 1887.
 — Where love is, God is also. 1887.
 VIRGILIUS. Works. (Bohn.)
 — Æneid; tr. by Cranch. 1872.
 VOISIN, A. Le service des secours publics. 1873.
 VOLTAIRE, F. M. A. de. Romances. 1885.
 WEBSTER, N. Dictionary. [n. t. p.]
 WHEATLEY, H. B. How to form a library. 1886.
 BOCOCH, K. Tax the area. 1887.
 GEORGE, H. Property in land.
 BLYTHE. Manual of practical chemistry.
 JOHNSTON. Chemistry of common life.
 ZELL. Business directory. 1881.

LAW DEPARTMENT.

- UNITED STATES land laws, local and temporary. Wash., 1880. 2 v., 14 p.
 CROCKER, E. B. Digest California reports. Sac., 1856. 23 p.
 DESTY, R. California penal code. S. F., 1883. 26 p.
 CALIFORNIA Codes, rejected editions. Political, civil, and civil procedure. Sac., 1871-72. 3 v., 26 p.
 RAILROAD laws in force, Jan. 1, 1879. Sac., 1879. 28 p.
 CONNECTICUT acts and laws, private. 1854. 32 p.
 GEORGIA. Laws. 1816. 41 p.
 KENTUCKY. Laws. 1861-62. 54 p.
 NEW HAMPSHIRE. Laws. 1842. 83 p.
 SKILLMAN, J. B. New York police reports. 1828. 91 p.
 SOUTH CAROLINA. Laws. 1846. 119 p.
 WEST VIRGINIA. Acts. 1884. 134 p.
 AFRICA. Province of Good Hope. Reports. 176 p.
 Menzies, W. 3 v.
 Watermeyer. 1 v.
 Buchanan, J. 3 v.
 Buchanan, E. J. 5 v.
 Juta. 1 v.
 Buchanan. Court of appeals. 1 v.
 Buchanan. Eastern districts. 1 v.
 — Statute law:
 Statute law of Cape of Good Hope. 1 v. 1862.
 Statute law of Griqualand. 2 v. 1871-1876.
 AUSTRALIA. New South Wales. Digests. 177 p.
 Watkins, J. L., and O'Conner, R. E. 1 v.
 — Reports.
 Reserved and equity judgments. 2 v.
 N. S. W. Reports. 14 v.
 Knox, G. 1 v.
 Knox, G., and Fitzhardinge, G. H. 2 v.
 Tarleton's term reports.
 — New Zealand Reports.
 Macassey, J. 1 v.
 Fenton's important judgments. 1 v.
 Court of Appeals reports. 3 v.
 Olivier, Bell and Fitzgerald. 5 pts.
 — Law Journals.
 Colonial law journal. 1 pt.
 New Zealand jurist. 2 v.
 New Zealand jurist, N. S. 4 v.
 — Queensland. Reports.
 Queensland law reports. 3 pts.
 — South Australian law reports. 12 v.
 — Victoria.
 Kerford, G. B., and Box, J. B. Digest. 1 v.
 A'Beckett, T. Reserved judgments. 3 v.
 Australian law times. 4 v.
 CASSELS, R. Manual of procedure in Supreme and Exchequer courts, Canada. Toronto, 1877. 180 p.
 CEYLON. Reports.
 Mutukisna, H. F. 1 v.
 Marshall, C. 1 v.
 Austin, N. J. 1 v.
 Nell, L. 1 v.
 Murray, A. 1 v.
 Beling, W. G., and Vanderstraaten, J. W. 1 v.
 Lorenz, C. A. 1 v.
 Creasy, H. 1 v.
 Crowther, J. 1 v.
 Beling, W. G. 1 v.
 Beven, E., and Mills, A. 1 v.
 CEYLON. Legislative enactments. 1 v.
 INDIA. Digest. Cowell, H. 1 v.
 INDIAN law reports.
 Bombay series. 4 v.
 Calcutta series. 5 v.
 Madras series. 1 v.
 Allahabad series. 2 v.
 BOMBAY. Digest. Branson, R. M. A. 1 v.
 — High Court reports. 12 v.
 — Hyde, E. 2 v.
 — Full bench rulings. 1 v.
 — Bourke, W. M. 1 v.

- MADRAS. High Court reports. 8 v.
 — Code.
- NORTHWESTERN PROVINCES. Reports.
 Agra High Court reports. 4 v.
 N. W. Provinces, H. C. R. 7 v.
 Full Bench rulings. 1 v.
 — Code. 1 v.
- ODDH Code. 1 v.
- WEST INDIES. Jamaica. Reports:
 Grant, J. Notes of cases. 1 v.
 Schalk. 2 pts.
 Morris, M. 1 v.
 Mumford, W. 1 v.
 Judax, A., and Swan, R. 1 v.
 Macdougall, W. C. 1 v.
- AMERICAN civil law journal. 4 nos. N. Y., 1873. 195 p.
- BLACKSTONE, W. Commentaries, by J. Wendell. 4 v. 215 p.
- COWDERY, J. F. Citizen's law book. S. F., 1883. 248 p.
- DESTY, R. Federal procedure. S. F., 1884. 261 p.
- Manual of practice in U. S. courts. S. F., 1875.
 — Same. 2d ed. S. F., 1877.
- EMERIGON, B. M. Essay on maritime loans. Balt., 1811. 272 p.
- EDWARDS, I. Law of railroads. Alb., 1856. 271 p.
 — Same. 2d ed. Alb., 1878.
- HEINECCIO, J. G. Elementos del derecho. Madrid, 1837. 302 p.
- MARVIN, J. G. Legal bibliography. 343 p.
- PELOUBET, S. S. Students' law dictionary. N. Y., 1879. 366 p.
- ROBERTS, H. M. Pocket manual of rules of order. Chic., 1880. 385 p.
- SCINTALLE juris. S. F., 1877. 392 p.
- SHARSWOOD, G. Professional ethics. Phil., 1860. 396 p.
- SOUTHARD, S. L. Argument in case of Deew. Phil., 1834. 404 p.
- STEPHEN, H. J. Principles of pleading. Wash., 1875. 407 p.
- TAYLOR, T. Law glossary. N. Y., 1858. 415 p.
- WARDE, W. P. Manual of American mining law. St. Louis, 1882. 429 p.
- FREEMAN, A. C. Co-tenancy and partition. 2d ed. S. F., 1886.
- HENRY, J. Institutes of the laws of Holland. 1828.
- LINDLEY, C. Commentaries on the California Codes. S. F., 1874.
- SMITH, U. Key to (his) diagram of parliamentary rules. Battle Creek, 1885.
- THOMPSON, S. D. Law of trials. Chic., 1889. 2 v.
- WATKINS, J. Report of the trial of Elizabeth Fenning. Lond., 1815.
- WESTERN, T. G. Commentaries on the constitution and laws of England. Lond., 1838.

George T. Clark, late Deputy Librarian under ex-Librarian Wallis, was, at the request of Mr. Wallis, and by your instructions, retained in the Library to represent my predecessor while the work of taking the inventory and counting the books, etc., was being performed. Mr. Clark reports that he is unable to find in the Library the books represented in the foregoing lists.

I have prepared, and present herewith, a list of the books added to the Library during the forty-first fiscal year, from April 7 to June 30, 1890, both dates inclusive, which shows that five hundred and eighty-four volumes have been received by me.

The accompanying transcript of the cash book shows that \$14,250 84 have been drawn from the State Library Fund, and that claims to that amount have been paid. For items of bills, see vouchers 1 to 122, inclusive, which are on file in this office.

The records of this office show that the Postage and Expressage Fund for the forty-first fiscal year was completely exhausted by my predecessor.

DEBITS FOR THE FORTY-FIRST FISCAL YEAR.

From April 7 to June 30, 1890, Inclusive.

April 7—To amount in National Bank of D. O. Mills & Co.	\$9 88
April 8—To warrant	1,406 37
May 5—To warrant	1,656 81
June 7—To warrant	5,397 41
June 9—To warrant	5,790 25
Total	\$14,260 72

CREDITS FOR THE FORTY-FIRST FISCAL YEAR.

From April 7 to June 30, 1890, Inclusive.

Date.	To WHOM PAID.	No. of Check.	No. of Voucher	Cr.
1890.				
April 8..	M. E. Southworth	9042	1	\$156 00
April 8..	Western Union Telegraph Co.	9043	2	14 04
April 8..	Wells, Fargo & Co.	9044	3	122 02
April 8..	Wm. J. Hardy	9045	4	100 00
April 8..	E. Boehme	9046	5	62 50
April 8..	J. M. Page	9047	6	120 00
April 8..	Ella Burke	9048	7	52 00
April 8..	Wempe Bros.	9049	8	11 15
April 8..	H. H. Snow	9050	9	15 95
April 8..	W. McLaughlin.	9051	10	18 05
April 8..	A. M. Smith	9052	11	26 00
April 8..	Fred. Kolliker	9053	12	3 00
April 8..	Sunset Telephone and Telegraph Co.	9054	13	7 35
April 8..	A. S. Clark	9055	14	1 06
April 8..	C. C. Hine	9056	15	80
April 8..	Themis	9057	16	3 00
April 8..	W. S. Leake	9058	17	180 00
April 8..	J. G. Davis	9059	18	39 00
April 8..	George W. Reed	9060	19	4 60
April 8..	C. H. Krebs & Co.	9061	20	70
April 8..	Sacramento Transfer Co.	9062	21	22 60
April 8..	Jas. Longshore, Jr.	9063	22	20 00
April 8..	W. H. Hanlon	9064	23	80 00
April 8..	W. F. Hanrahan	9065	24	93 35
April 8..	M. E. Hogan	9066	25	103 35
April 8..	Genevieve Green	9067	26	103 35
April 8..	R. D. Stephens	9068	27	5 00
April 8..	F. D. Ryan	9069	28	16 50
April 8..	H. E. McCune	9070	29	5 00
April 8..	W. S. Green	9071	30	10 00
April 8..	Fleet F. Strother	9072	31	10 00
May 5..	H. E. McCune	9073	32	5 00
May 5..	Fleet F. Strother	9074	33	10 00
May 5..	H. S. Crocker & Co.	9075	34	5 94
May 5..	Sacramento Glass and Crockery Co.	9076	35	14 75
May 5..	Chas. Wilke	9077	36	2 00
May 5..	Kirk, Geary & Co.	9078	37	3 25
May 5..	W. D. Perkins	9079	38	25 00
May 5..	John C. Medley	9080	39	45 00
May 5..	Jas. G. Davis	9081	40	361 20
May 5..	Whittier, Fuller & Co.	9082	41	16 00
May 5..	Lipman, Weiger & Co.	9083	42	16 00
May 5..	E. A. Bovyer	9084	43	426 00
May 5..	Frank H. Wing	9085	44	31 75
May 5..	R. D. Stephens	9086	45	50 00
May 5..	James Longshore, Jr.	9087	46	60 00
May 5..	M. E. Hogan	9088	47	80 00
May 5..	George T. Clark	9089	48	120 00
May 5..	W. S. Leake	9090	49	168 50
May 5..	C. Roth	9091	50	1 50
May 5..	R. M. Wood & Co.	9092	51	3 00
May 5..	J. H. Hickeox	9093	52	5 00
May 5..	C. S. Houghton	9094	53	2 00
May 5..	Sunset Telephone and Telegraph Co.	9095	54	15 00
May 5..	J. P. Hughes	9096	55	85 92
	Amount carried forward			\$2,094 18

REPORT OF TRUSTEES OF STATE LIBRARY.

CREDITS FOR THE FORTY-FIRST FISCAL YEAR—Continued.

Date.	To WHOM PAID.	No. of Check.	No. of Voucher	Cr.
1890.	Amount brought forward			\$2,994 18
May 5.	M. E. Southworth	9097	56	104 00
June 7.	H. E. McCune	9098	57	10 00
June 7.	H. E. McCune	9099	58	5 00
June 7.	Fleet F. Strother	9100	59	10 00
June 7.	W. S. Green	9101	60	10 00
June 7.	Bancroft-Whitney Co.	9102	61	17 25
June 7.	Bancroft-Whitney Co.	9103	62	113 50
June 7.	Jos. A. Hofmann	9104	63	6 80
June 7.	The Boston Book Co.	9105	64	708 88
June 7.	The J. Dewing Co.	9106	65	83 25
June 7.	D. Appleton & Co.	9107	66	6 00
June 7.	Gebbie & Co.	9108	67	40 00
June 7.	The Postal Index Co.	9109	68	1 50
June 7.	W. Doan	9110	69	2 65
June 7.	E. R. Taylor	9111	70	5 60
June 7.	Win. Doxey	9112	71	1 50
June 7.	G. P. Putman's Sons	9113	72	5 00
June 7.	The History Co.	9114	73	5 50
June 7.	C. S. Houghton	9115	74	2 00
June 7.	American Jersey Cattle Club	9116	75	2 00
June 7.	Callaghan & Co.	9117	76	6 50
June 7.	W. B. Walkup	9118	77	10 00
June 7.	T. W. O'Neil	9119	78	28 00
June 7.	Wells, Fargo & Co.	9120	79	12 18
June 7.	John C. Medley	9121	80	8 00
June 7.	Scott & Lee	9122	81	142 44
June 7.	W. D. Comstock	9123	82	130 00
June 7.	Whitter, Fuller & Co.	9124	83	1 80
June 7.	R. O. Cravens	9125	84	280 00
June 7.	L. M. Landsborough	9126	85	140 00
June 7.	Brand, Lawton, Barnett & Co.	9127	86	840 00
June 7.	G. Williams	9128	87	3 50
June 7.	Sacramento Transfer Co.	9129	88	30 88
June 7.	W. D. Perkins	9130	89	17 00
June 7.	Western Union Telegraph Co.	9131	90	3 34
June 7.	Sunset Telephone and Telegraph Co.	9132	91	19 75
June 7.	A. J. Muir	9133	92	60 30
June 7.	C. H. Rave	9134	93	21 00
June 7.	Joseph Hahn & Co.	9135	94	2 50
June 7.	R. D. Stephens	9136	95	10 00
June 7.	W. S. Leake	9137	96	10 00
June 7.	Crouch & Lyman	9138	97	86 29
June 7.	E. A. Bovyer	9139	98	750 59
June 7.	M. E. Southworth	9140	99	130 00
June 7.	James Longshore, Jr.	9141	100	75 00
June 7.	M. E. Hogan	9142	101	100 00
June 7.	W. S. Leake	9143	102	200 00
June 7.	George T. Clark	9144	103	150 00
June 7.	James G. Davis	9145	104	1,091 91
June 9.	William Doxey	9146	105	3,043 10
June 9.	William Doxey	9147	106	147 00
June 9.	Bancroft Bros. & Co.	9148	107	571 36
June 9.	Bancroft-Whitney Co.	9149	108	259 25
June 9.	The Boston Book Co.	9150	109	327 44
June 9.	Gebbie & Co.	9151	110	105 00
June 9.	The J. Dewing Co.	9155	111	13 00
June 9.	Publishers' Weekly	9156	112	3 18
June 9.	D. Appleton & Co.	9157	113	13 00
June 9.	William Cushing	9158	114	10 00
June 9.	West Publishing Co.	9159	115	17 90
June 9.	William Wood & Co.	9160	116	7 00
June 9.	Carswell & Co.	9161	117	14 96
June 9.	H. H. Moore	9162	118	318 00
June 9.	The Bancroft Co.	9163	119	910 06
June 9.	W. S. Leake	9164	120	10 00
June 9.	R. D. Stephens	9165	121	10 00
June 9.	W. S. Green	9166	122	10 00
	Balance in National Bank, D. O. Mills & Co.			9 88
				\$14,260 72

Checks 9151-9153 canceled.

STATEMENT

Showing the Condition of the State Library Fund from April 7 to June 30, 1890.

DEBITS.

April 7—To amount to credit State Library Fund	\$19,972 91	
May 1—To fees from office Secretary of State	1,908 00	
June 2—To fees from office Secretary of State	1,877 00	
		<u>\$23,757 91</u>

CREDITS.

April 8—By warrant	\$1,406 37	
May 5—By warrant	1,656 81	
June 9—By warrant	5,397 41	
June 11—By warrant	5,790 25	
June 30—By balance on hand	9,507 07	
		<u>\$23,757 91</u>

STATE OF CALIFORNIA, }
 County of Sacramento. }

I, W. D. Perkins, Secretary of the Board of Trustees of the State Library, do solemnly swear that the foregoing is a true and correct statement of expenditures of the State Library for the forty-first fiscal year, from April 7, 1890, to June 30, 1890.

W. D. PERKINS.

Subscribed and sworn to before me, this tenth day of October, 1890.

THEO. REICHERT,
 Surveyor-General.

By D. M. ANGIER, Deputy.

List of books received for the California State Library from

No. of Book.	No. Vols.	TITLE OF BOOK.
79967-70..	4	United States Patent Office specifications and drawings, February and March, 1889. Wash., 1889.
79971-73..	3	U. S. Congress, 50th, 1st sess. Senate rep., v. 1-2, 10. Wash., 1888.
79974-77..	4	U. S. Congress, 50th, 1st sess. Senate ex. docs., v. 1, 6, 8, 10. Wash., 1888.
79978.....	1	U. S. Congress, 50th, 1st sess. Senate misc. docs., v. 1. Wash., 1888.
79979-82..	4	U. S. Congress, 50th, 1st sess. House ex. docs., v. 14, 19, 23, 24. Wash., '89.
79983-89..	7	U. S. Congress, 50th, 1st sess. House misc. docs., v. 3, 5, 6, 12, 14, 18, 27. Wash., 1889.
79990.....	1	U. S. Congress, 50th, 2d sess. House ex. docs., v. 23. Wash., 1889.
79991-92..	2	U. S. Congress, 50th, 2d sess. House misc. docs., v. 5, 18. Wash., 1889.
79993-94..	2	Ohio. Legislature executive documents 1888; pt. 1-2. Columbus, 1889.
79995.....	1	Ohio. Senate Journal, 1889. Akron, 1889.
79996.....	1	Ohio. House of Representatives. Journal, 1889. v. 85. Akron, 1889.
79997.....	1	Ohio. Supt. of Insurance, 22d report. pt. 1. Columbus, 1889.
79998.....	1	Ohio. Supt. of Insurance, 22d report. pt. 2. Life. Columbus, 1889.
79999.....	1	Ohio. School Laws, 1889. Columbus, 1889.
80000.....	1	Ohio. Secretary of State. Annual rep., 1888. Columbus, 1889.
80001.....	1	Ohio. Roster Commission. Official roster, 1861-66. v. 10. Cin., 1889.
80002.....	1	Ohio. Auditor. Annual report, 1889. Columbus, 1890.
80003.....	1	Ohio. Com. of Railways. Annual report, 1888. Columbus, 1889.
80004.....	1	Ohio. State Board of Agric. 43d annual report, 1888. Columbus, 1889.
80005.....	1	New Jersey. Supreme Court. Reports, v. 51 (Vroom). Trenton, 1890.
80006.....	1	New Jersey. Equity reports, v. 45 (Stewart). Trenton, 1890.
80007.....	1	New Jersey. Legislature. Acts, 1889. Trenton, 1889.
80008.....	1	New Jersey. Senate. Journal, 113th sess. Trenton, 1889.
80009.....	1	New Jersey. General Assembly. Minutes, 113th sess. Trenton, 1889.
80010-12..	3	New Jersey. Legislature. Documents, 113th sess. 3 v. Trenton, 1889.
80013.....	1	New Jersey. Manual of the Legislature, 1890. Trenton, 1889.
80014.....	1	New Jersey. Digest of fees, costs, and salaries (Starr). Camden, 1889.
80015.....	1	New Jersey. Geological Survey. Final report. v. 2:1. Trenton, 1889.
80016-19..	4	Michigan. Supreme Court. Reports, 68, 69, 70, 76. Chic., 1889-90.
80020.....	1	Michigan. General school laws, 1889. Lansing, 1889.
80021.....	1	Vermont. Supreme Court. Reports, 61 (Prouty). Rutland, 1889.
80022.....	1	Vermont. Senate Journal, 1888. Montpelier, 1889.
80023.....	1	Vermont. House Journal, 1888. Montpelier, 1889.
80024.....	1	Vermont. General Assembly Laws, 1888. Burlington, 1889.
80025.....	1	Vermont. State Dairymen's Ass'n. Report, 19-20. Montpelier, 1889-90.
80026.....	1	Vermont. Insurance Com'ers. Report, 1888-89. Montpelier, 1888-89.
80027.....	1	Vermont. Inspector of Finance. Annual report, 1889. Burlington, 1889.
80028.....	1	Vermont. Secretary of State. 31st registration report. Rutland, 1888.
80029.....	1	Vermont. Agric. Exp't Station. 2d annual report. Burlington, 1889.
80030.....	1	North Dakota. Jour. of the Constitutional Convention. Bismarck, 1889.
80031.....	1	North Dakota. Proceedings of the Constitutional Convention. Bism'k, 1889.
80032.....	1	North Dakota. Legislative manual. Bismarck, 1890.
80033.....	1	Indiana. Supreme Court. Reports, 120 (Griffiths). Indianapolis, 1890.
80034.....	1	Indiana. General Assembly. Laws, 1889. Indianapolis, 1889.
80035.....	1	Georgia. General Assembly. Acts and resolutions. Atlanta, 1889.
80036.....	1	South Carolina. Gen. Assembly. Acts and resolutions. Columbia, 1890.
80037.....	1	Texas. Supreme Court. Reports, 74 (Walker). Austin, 1890.
80038.....	1	Missouri. Court of Appeals. Reports, v. 37. Columbia, 1890.
80039.....	1	Mississippi. Supreme Court. Reports, v. 66. Phil., 1890.
80040.....	1	Arkansas. House of Representatives. Jour., 27th sess. Little Rock, 1889.
80041.....	1	Arkansas. Geological Survey. Report, 1888. v. 1. Little Rock, 1888.
80042.....	1	New York. Manual for the use of the Legislature. Albany, 1890.
80043.....	1	Connecticut. Pub. records, 1775-76; by C. J. Hoadly; v. 15. Hartf., 1890.
80044.....	1	University of Cal. Library. Contents-Index. v. 1. Berkeley, 1890.
80045.....	1	Detroit. Public Library. Catalogue, 1888. Detroit, 1889.
80046-54..	9	National Conference of Charities. Proceedings, 1st, 8th, 9th, 11th, 16th sess. Boston, 1881-89.
80055.....	1	Miller, J. B. Trade organizations in politics. N. Y., 1887.
80056.....	1	Bore, H. Story of the invention of steel pens. N. Y., 1890.
80057.....	1	Chicago Historical Soc. Collection, v. 4. Chic., 1890.
80058.....	1	U. S. Engineer Dept. U. S. Geog. Surv. 100th merid. Geog. report, v. 1. Wash., 1889.
80059-60..	2	U. S. 20th Congress. 1st sess. House exec. docs., v. 2-3. [n. t. p.]
80061.....	1	U. S. 21st Congress. 1st sess. House exec. docs., v. 1. [n. t. p.]
80062.....	1	U. S. 23d Congress. 1st sess. Senate docs., v. 14. Wash., 1835.
80063.....	1	U. S. 24th Congress. 1st sess. House exec. docs., v. 5. [n. t. p.]
80064.....	1	U. S. Patent Office. Laws and rules of practice. Wash., 1886-89.
80065-66..	2	N. S. Wales. Jour. of the Legislative Council. v. 44; pt. 1-2. Sydney, 1889.

No. of Book.	No. Vols.	TITLE OF BOOK.
80067	1	Roberts, D. Vermont digest, supplement. Burlington, 1889.
80068	1	Coffin, E. P. Supplemental Maine digest. Portland, 1890.
80069	1	Beach, C. T. Digest of railway decisions, 1889. Jersey City, 1890.
80070	1	New York. Criminal reports. v. 7. (Connolly.) New York, 1890.
80071	1	Marr, R. H. Index to Acts of the Legislature of La. New Orleans, 1890.
80072-73	2	Ohio. Revised statutes; ed. by Smith and Benedict. Cincinnati, 1890.
80074-75	2	Warvelle, G. W. Law of vendor and purchase. Chic., 1890.
80076	1	District of Columbia reports, v. 6. (Mackey.) Wash., 1889.
80077	1	Law Reports, v. 16. Indian appeals. Lond., 1889.
80078	1	Nova Scotia. Statutes, 52 Victoria. Halifax, 1889.
80079	1	New Brunswick. General Assembly. Acts, 1889. Fredericton, 1889.
80080-81	2	Ontario. Court of Appeal. Reports, v. 15-16. Toronto, 1890.
80082	1	Goebel. Reports of cases in Probate Court, Ohio. Cincinnati, 1890.
80083	1	Webb. Record of title. St. Louis, 1890.
80084-85	2	American State reports. (Freeman.) v. 11. (2 cop.) S. F., 1890.
80086	1	Complete digest; pt. 2, 1889. (Jacob, and others.) N. Y., 1890.
80087	1	Lawson. Rights, remedies, and practice. v. 5. S. F., 1890.
80088	1	Barton. Legislative manual of Washington, 1889-90. [Tacoma, 1889].
80089	1	Wheeler. Law of carriers. N. Y., 1890.
80090	1	Remsen. Interstate succession in N. Y. 2d ed. N. Y., 1890.
80091	1	Jacobs and Chaney. Digest of decisions of S. C. of Mich., v. 2. Chic., 1889.
80092	1	Morrell. Reports of cases under bankruptcy Act. v. 6. Lond., 1890.
80093	1	Washington. Writings; ed. by W. C. Ford; v. 6. N. Y., 1890.
80094	1	Bancroft, H. H. Works; v. 81. S. F., 1890.
80095	1	Recluse. The earth and its inhabitants: Oceanica. N. Y., 1890.
80096	1	Dictionary of national biography. (Stephen & Lee); v. 22. N. Y., 1890.
80097	1	Map of San Benito Co., Cal., 1890. S. F., 1890.
80098-131	34	Graphic, The; an illustrated weekly newspaper; v. 6-39. Lond., 1872-89.
80132-46	15	Appleton's journal; v. 1-15. N. Y., 1869-76.
80147-49	3	American register and magazine; v. 1, 5-6. Phil., 1848-51.
80150-52	3	Bibliographer, The. v. 1-6. 6 v. in 3. Lond., 1882-84.
80153-64	12	Chambers' Edinburgh journal; v. 1-12. Lond., 1832-43.
80165-218	54	U. S. Insurance magazine; n. s., v. 1-53; index, 1-43. N. Y., 1855-81.
80219-23	5	British Meteorological Soc. Proceedings; v. 1-5. Lond., 1863-71.
80224-35	12	Quarterly journal of the Meteorological Soc.; v. 1-12. Lond., 1873-86.
80236-48	13	Quarterly journal of agriculture; v. 1-13. Edin., 1829-43.
80249-62	14	Journal of agriculture; July, 1843-June, 1867. Edin., 1845-67.
80263-88	26	Architect, The; a weekly journal; v. 1-14, 18-26, 28-30. Lond., 1869-83.
80289-97	9	Brain; a journal of neurology; v. 1-9. Lond., 1879-87.
80298-356	59	British almanac, and companion; 1828-85, and index. Lond., [1828-85].
80357-95	39	Economist, The; v. 4, 6-43; 1846, 1848-85. Lond., 1846-85.
80396-99	4	Symons. British rainfall, 1883, 1885-87. Lond., 1884-88.
80400	1	Wyoming Ter. session laws, 1890. Cheyenne, 1890.
80401-02	2	Sacramento Record-Union. "A," "B," July-Dec., 1889 (2 cop.). Sac., 1889.
80403	1	Evening Bulletin. Apr.-Oct., 1889. S. F., 1889.
80404-05	2	Morning Call. July-Dec., 1889. S. F., 1889.
80406-07	2	Alta California. July-Dec., 1889. S. F., 1889.
80408-09	2	S. F. Chronicle. July-Dec., 1889. S. F., 1889.
80410-11	2	S. F. Examiner. July-Dec., 1889. S. F., 1889.
80412	1	Evening Post. July-Dec., 1889. S. F., 1889.
80413	1	S. F. Daily Report. July-Dec., 1889. S. F., 1889.
80414	1	Morning Times. July-Dec., 1889. Oakland, 1889.
80415	1	Oakland Daily Evening Tribune. July-Dec., 1889. Oakland, 1889.
80416	1	San José Daily Herald. July-Dec., 1889. San José, 1889.
80417	1	San José Daily Mercury. July-Dec., 1889. San José, 1889.
80418-19	2	Los Angeles Daily Herald. July-Dec., 1889. Los Angeles, 1889.
80420	1	Boston Herald. July-Dec., 1889. Bost., 1889.
80421-22	2	Chicago Tribune. July-Dec., 1889. Chic., 1889.
80423-24	2	Cincinnati Enquirer. July-Dec., 1889. Cincinnati, 1889.
80425-26	2	Courier-Journal. July-Dec., 1889. Louisville, 1889.
80427-28	2	New York Herald. July-Dec., 1889. N. Y., 1889.
80429-30	2	New York Tribune. July-Dec., 1889. N. Y., 1889.
80431-32	2	New York Sun. July-Dec., 1889. N. Y., 1889.
80433-34	2	New York World. July-Dec., 1889. N. Y., 1889.
80435-36	2	Philadelphia Press. July-Dec., 1889. Phil., 1889.
80437-38	2	Springfield Republican. July-Dec., 1889. Springf., 1890.
80439-41	3	Pall Mall Gazette. Apr.-Dec., 1889. Lond., 1890.
80442-43	2	Denver Times. July-Dec., 1889. Denver, 1890.
80444	1	The Bee. July-Dec., 1889. Sacramento, 1890.
80445	1	Merrill. American and Eng. encyclop. of law; v. 11. Northport, 1890.

RECEIVED—Continued.

[illegible]

No. of Book.	No. Vols.	TITLE OF BOOK.
80446	1	Northwest Territories. 1st Leg. Ass., 2d sess. Ordinances. Regina, 1890.
80447	1	Newfoundland. Gen. Assembly. Acts. 52d. Vict. [n. p.], 1890.
80448	1	Warner. Service of Papers. N. Y., 1890
80449	1	Adams. Tariff on imports. N. Y., 1890
80450	1	Bigelow. Elements of equality. Bost., 1879
80451	1	Pomeroy. Introduction to municipal law. 2d ed. S. F., 1886
80452	1	Paget. Judicial puzzles. S. F., 1884
80453	1	Croke. Poems of the law. S. F., 1885
80454	1	Croke. Lyrics of the law. S. F., 1884
80455	1	Peloubet. Students' law dictionary. N. Y., 1881
80456	1	Peloubet. Legal maxims. N. Y., 1880
80457-59	3	Ewell. Essentials of the law. Bost., 1883-89.
80460	1	Robinson. Elementary law. Bost., 1882
80461	1	Bates. Law of limited partnership. Bost., 1886
80462	1	Warren. Introduction to law studies. S. F., 1870
80463	1	Warren. Duties of attorneys. S. F., 1870
80464	1	Ewell. Medical jurisprudence. Bost., 1887
80465	1	Brown. Law dictionary. S. F., 1882
80466-67	2	U. S. Reports; v. 133. (Davis.) (2 cop.) N. Y., 1890.
80468-69	2	Barbour. Rights of persons; 2 v. Rochester, 1890
80470	1	Lower Canada Jurist; v. 33. Montreal, 1889
80471	1	Watts. Laws of Missouri, relating to private corporations. St. Louis, 1890
80472-73	2	Dillon. Com. on law of municipal corporations, 4th ed. Bost., 1890.
80474	1	Hawaiian reports; v. 7. Honolulu, 1890
80475-76	2	Freeman. American state reports; v. 12. (2 cop.) S. F., 1890.
80477	1	Cobbey. Law of replevin. Beatrice, Neb., 1890
80478	1	Southworth & Jones. N. Y. Manufacturing, etc., corporation acts. N. Y., 1890
80479	1	American digest, annual, 1889. St. Paul, 1890.
80480	1	Atlantic reporter; v. 18. St. Paul, 1890
80481	1	Southern reporter; v. 6. St. Paul, 1890
80482	1	N. Y. Supp. (National reporter system); v. 7. St. Paul, 1890
80483	1	N. Y. S. C. Reports; v. 62 (Hun. 55). N. Y., 1890
80484-85	2	N. Y. Court of Appeals. Reports; v. 117, 118. (Sickels.) Albany, 1890.
80486	1	Ohio S. C. Reports; n. s., v. 46. Cincinnati, 1890.
80487	1	North Carolina S. C. Reports; v. 104. Raleigh, 1890.
80488	1	Indiana S. C. Reports; v. 121. Indianap., 1890
80489	1	Iowa S. C. Reports; v. 78. Columbia, 1890
80490	1	Kansas S. C. Reports; v. 42. Topeka, 1890
80491	1	Texas S. C. Reports; v. 75. Austin, 1890.
80492	1	Alabama S. C. Reports; v. 88. Montgomery, 1890.
80493-94	2	California S. C. Reports; v. 82. (2 cop.) S. F., 1890.
80495	1	History of the State of Kansas. Chic., 1883
80496	1	Chambers' Encyclopedia. New ed., v. 5. Phil., 1890.
80497	1	Shakespeare. As you like it. (Var. ed.) Phil., 1890
80498	1	Appleton's annual cyclopaedia, 1889; v. 14. N. Y., 1890.
80499-500	2	Annual statistician and economist, 1890. (2 cop.) S. F., 1890
80501	1	Amer. Jersey Cattle Club. Herd Register. v. 32. N. Y., 1890
80502	1	Journal of the Quekett Microscopical Club. Ser. 2; v. 3. Lond., 1887-89.
80503	1	The Entomologist; v. 22. Lond., 1889
80504	1	L'Art pour tous, 1889. Paris, 1889
80505	1	Virginia Law Journal; v. 12, 1888. Richmond, 1888
80506	1	Entomologica Americana; v. 5. Brooklyn, 1889.
80507	1	Bolles. Bank officers. N. Y., 1890
80508	1	Thornton. Supp. to Indiana Stat. Construction. Indianap., 1890.
80509	1	Mitchell. Real estate and conveyancing in Pennsylvania. Phil., 1890
80510	1	Library of American Literature; v. 10. N. Y., 1889
80511	1	Wade. History of the middle and working classes. Lond., 1835.
80512	1	Guy's hospital reports; v. 46. 1889. Lond., 1889
80513-14	2	Brassey. British navy; v. 2-3. Lond., 1882
80515	1	Counsel. Maxims, political, philosophical, and moral. Melb., 1889.
80516	1	Ingersoll. Recollections, v. 1. Phil., 1861
80517	1	California. Laws governing the National Guard. Sac., 1890
80518-19	2	Cal. State Series. Elementary Geography. (2 cop.) Sac., 1890
80520	1	Cal. State Agric. Soc. Transactions, 1889. Sac., 1890.
80521-22	2	U. S. Geol. Surv. of the Ters. Annual report; 5th, 6th. Wash., 1872-73.
80523-24	2	U. S. Geol. Surv. of the Ters. Bulletin; v. 5-6. Wash., 1880-82
80525-26	2	U. S. Geol. Surv. of the Ters. Report; v. 3. Wash., 1884
80527	1	U. S. Mint. Production of precious metal, 1889. Wash., 1890.
80528	1	U. S. Sec. of Agriculture. 1st annual report, 1889. Wash., 1889

RECEIVED—Continued.

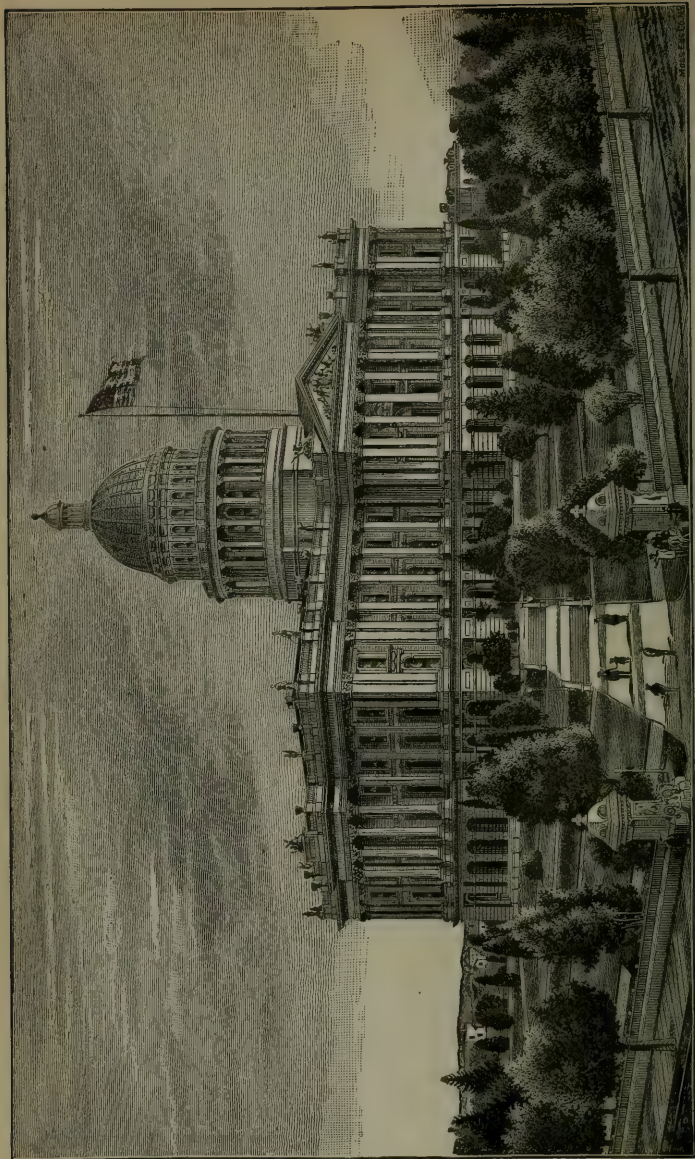
When Received.	From Whom Received.	Price Paid.	Remarks.
June, 1890	Bancroft-Whitney Co.	\$1 50	
June, 1890	Bancroft-Whitney Co.	4 00	
June, 1890	Bancroft-Whitney Co.	2 75	
June, 1890	Bancroft-Whitney Co.	3 00	
June, 1890	Bancroft-Whitney Co.	3 00	
June, 1890	Bancroft-Whitney Co.	4 50	
June, 1890	Bancroft-Whitney Co.	1 50	
June, 1890	Bancroft-Whitney Co.	1 50	
June, 1890	Bancroft-Whitney Co.	1 50	
June, 1890	Bancroft-Whitney Co.	1 25	
June, 1890	Bancroft-Whitney Co.	1 25	
June, 1890	Bancroft-Whitney Co.	7 50	
June, 1890	Bancroft-Whitney Co.	3 00	
June, 1890	Bancroft-Whitney Co.	3 00	
June, 1890	Bancroft-Whitney Co.	3 00	
June, 1890	Bancroft-Whitney Co.	3 00	
June, 1890	Bancroft-Whitney Co.	3 00	
June, 1890	Bancroft-Whitney Co.	5 00	
June, 1890	Bancroft-Whitney Co.	12 00	
June, 1890	Bancroft-Whitney Co.	5 25	
June, 1890	Bancroft-Whitney Co.	2 50	
June, 1890	Bancroft-Whitney Co.	12 60	
June, 1890	Bancroft-Whitney Co.	5 00	
June, 1890	Bancroft-Whitney Co.	8 00	
June, 1890	Bancroft-Whitney Co.	6 00	
June, 1890	Bancroft-Whitney Co.	4 25	
June, 1890	West Publishing Co.	6 45	
June, 1890	West Publishing Co.	3 75	
June, 1890	West Publishing Co.	3 75	
June, 1890	West Publishing Co.	3 75	
June, 1890	New York Regents of the University		Exchange.
June, 1890	New York Regents of the University		Exchange.
June, 1890	Ohio Secretary of State		Exchange.
June, 1890	North Carolina State Librarian		Exchange.
June, 1890	Indiana		Exchange.
June, 1890	Iowa		Exchange.
June, 1890	Kansas		Exchange.
June, 1890	Texas		Exchange.
June, 1890	Alabama		Exchange.
June, 1890	California, Secretary of State		Donation.
June, 1890	Central School Supply Agency	5 50	
June, 1890	J. A. Hofmann	3 60	
June, 1890	J. A. Hofmann	3 20	
June, 1890	D. Appleton & Co.	6 00	
June, 1890	L. P. McCarty	8 00	
June, 1890	American Jersey Cattle Club	2 00	
June, 1890	Wm. Doxey	4 50	
June, 1890	Wm. Doxey	2 50	
June, 1890	Wm. Doxey	12 50	
June, 1890	Lamb & Smith (Jas. C. Lamb)	5 00	
June, 1890	Bancroft Bros. & Co.	2 50	
June, 1890	Bancroft-Whitney Co.	4 50	
June, 1890	Bancroft-Whitney Co.	2 00	
June, 1890	Bancroft-Whitney Co.	5 50	
June, 1890	A. L. Bancroft & Co.	4 50	
June, 1890	The Bancroft Co.	2 15	
June, 1890	C. S. Greene		Subscription.
June, 1890	Wm. Doxey	3 50	
June, 1890	E. Counsel		Donation.
June, 1890	C. J. Ingersoll		Donation.
June, 1890	R. H. Orton		Donation.
June, 1890	Superintendent of Public Instruction		Donation.
June, 1890	State Printer		Donation.
June, 1890	United States Department of the Interior		Donation.
June, 1890	United States Department of the Interior		Donation.
June, 1890	United States Department of the Interior		Donation.
June, 1890	United States Director of the Mint		Donation.
June, 1890	J. M. Rusk, Secretary of Agriculture		Donation.

LIST OF BOOKS RE-

No. of Book.	No. Vols.	TITLE OF BOOK.
80529-30..	2	U. S. Patent Office. Specifications and drawings of patents, April, 1889; pt. 1-2. Wash., 1889.....
80531.....	1	Cushing. Anonyms; pt. 1-4. Camb., 1889.....
80532.....	1	Illinois. Gen. Assembly Jour. of the Senate, 1889. Springfield, 1889....
80533.....	1	Illinois. Gen. Assembly Jour. of the House, 1889. Springfield, 1889....
80534-38..	5	Illinois. Gen. Assembly Reports. Springfield, 1889.....
80539.....	1	Mullan, J. Report on Cal. Indian war claims; v. 4. Wash., 1890.....
80540.....	1	New York Supplement; v. 8. (National Rep. System.) St. Paul, 1890....
80541.....	1	Beach. Digest of decisions in the Patent Office, 1880-90. Bost., 1890....
80542.....	1	American and English railroad cases; v. 40. Northport, 1890.....
80543.....	1	American and English corporation cases; v. 27. Northport, 1890.....
80544.....	1	Martindale. American law directory, 1890-91. Chic., 1890.....
80545.....	1	Illinois. Appellate Courts. Reports. Chic., 1890.....
80546.....	1	Stockbridge. Catalogue. Harris' coll. of Amer. Poetry. Providence, 1886....
80547.....	1	Redfield. Law and practice of surrogate's courts in N. Y. N. Y., 1890....
80548.....	1	North Dakota. Legislative Assembly. Laws, 1889-90. Bismarck, 1890....
80549.....	1	Winsor. Narrative and critical history of America; v. 1. Bost., 1889....
80550.....	1	Baylies. Rules of pleading. Rochester, 1890.....

CEIVED—Continued.

When Received.	From Whom Received.	Price Paid.	Remarks.
June, 1890	United States Commissioner of Patents		Donation.
June, 1890	William Cushing	\$20 00	
June, 1890	Illinois		Exchange.
June, 1890	Illinois		Exchange.
June, 1890	Illinois		Exchange.
June, 1890	Capt. John Mullan		Donation.
June, 1890	West Publishing Co.	3 75	
June, 1890	Bancroft-Whitney Co.	3 50	
June, 1890	Bancroft-Whitney Co.	4 75	
June, 1890	Bancroft-Whitney Co.	5 00	
June, 1890	Bancroft-Whitney Co.	10 00	
June, 1890	Bancroft-Whitney Co.	3 75	
June, 1890	J. C. Stockbridge	5 00	
June, 1890	Bancroft-Whitney Co.	7 50	
June, 1890	North Dakota		Exchange.
June, 1890	J. Dewing Co.	6 00	
June, 1890	Bancroft-Whitney Co.	6 25	



STATE OF CALIFORNIA.

FOURTEENTH BIENNIAL REPORT

OF THE

SUPERINTENDENT OF PUBLIC INSTRUCTION

FOR THE

SCHOOL YEARS ENDING JUNE 30, 1889, AND JUNE 30, 1890.

TRANSMITTED TO THE GOVERNOR, DECEMBER 10, 1890.



SACRAMENTO:

STATE OFFICE, : : : : : J. D. YOUNG, SUPT. STATE PRINTING.
1890.

STATE OF CALIFORNIA.
DEPARTMENT OF PUBLIC INSTRUCTION.
CAPITOL, SACRAMENTO.

OFFICE REGISTER, 1889-90.

IRA G. HOITT	State Superintendent.
MRS. JULIA B. HOITT	Deputy State Superintendent.
* HOWARD A. MOSES } JOSEPH PENTECOST }	Statistical Clerk.
W. F. PURNELL	Text-Book Clerk.
W. H. V. RAYMOND	Text-Book Editor.
J. L. EVANS	Porter.

* Died, May 2, 1890.

STATE OF CALIFORNIA,)
DEPARTMENT OF PUBLIC INSTRUCTION, }
SACRAMENTO, December 10, 1890. }

To his Excellency R. W. WATERMAN, Governor of California:

SIR: I have the honor to transmit herewith the fourteenth biennial report of the Superintendent of Public Instruction, for the school years ending June 30, 1889, and June 30, 1890, in accordance with Section 1532 of the Political Code of California.

Respectfully,

IRA G. HOITT,
Superintendent of Public Instruction.

STATE BOARD OF EDUCATION.

1887-1891.

HON. R. W. WATERMAN	Governor, Sacramento.
<i>President of the Board.</i>	
HON. IRA G. HOITT	Superintendent of Public Instruction, Sacramento.
<i>Secretary of the Board.</i>	
PROF. C. W. CHILDS	Principal State Normal School, San José.
PROF. IRA MORE	Principal State Normal School, Los Angeles.
PROF. E. T. PIERCE	Principal State Normal School, Chico.

STATE BOARD OF EDUCATION.

1891-1895.

HON. H. H. MARKHAM	Governor, Sacramento.
<i>President of the Board.</i>	
PROF. J. W. ANDERSON	Superintendent of Public Instruction, Sacramento.
<i>Secretary of the Board.</i>	
PROF. C. W. CHILDS	Principal State Normal School, San José.
PROF. IRA MORE	Principal State Normal School, Los Angeles.
PROF. E. T. PIERCE	Principal State Normal School, Chico.

REPORT.

Although it cannot be said of California, as was once said of the Indiana school system, that, from its inception to the present time, no backward step has been taken, yet our progress, considering the youth of our State, has been greater than that of any other State in the Union.

The constitutional amendment giving all control over teachers' examinations and teachers' certificates to the County Boards, was a move in the wrong direction, and should be changed without further delay.

The lack of provision for High Schools is another mistake that is beginning to be more than ever keenly felt. The powers of the State Board of Education should be widened to admit of examining applicants for all State diplomas, and of licensing and appointing General Institute Conductors for the State, for whose employment and pay the law should provide. However, our school law, generally, is in a practical shape and works well.

Nowhere are there more liberal school appropriations, both State and local, than in California; and nowhere are there better schools, especially in the rural districts. Visitors among our district schools express surprise at the superior intelligence and culture of teachers employed in the outlying sections, miles away from traveled centers, at the professional pride displayed in the management of small schools of even less than twenty pupils, and at the efforts and sacrifices made to obtain for their districts a first class reputation.

In fulfilling the one duty of attending Institutes, many cases of enthusiasm have been noted. In one case, two young ladies traveled nine miles on snowshoes to be present, and in many others, long night journeys over mountains and rugged roads, and through winter storms, have been taken with the same purpose.

Science teaching, clay modeling, kindergarten methods, and manual training, can all be discovered in some of these schools, showing a spirit of progress undiscoverable in the same grade of schools in Eastern States.

This state of affairs is due to the good wages paid (the *minimum* amount of State appropriation to districts being \$400), to the excellent system of county supervision, and, *often*, to the professional spirit implanted by our Normal Schools.

The amount of money expended by the State for school purposes during the two years ending June 30, 1889, and June 30, 1890, has been more liberal than ever before. The growth of the State rendered this necessary, to do justice to all claimants for an education. We were, however, fortunate in having a Legislature that responded cordially to the needs of this department.

SCHOOL REVENUE AND RATE OF TAXATION.

Total amount of securities held in trust by the State Treasurer for the School Fund, according to the latest report from the State Controller to this office, is \$3,268,350, and consists of \$1,541,500 of State Funded Debt Bonds (6 per cent), and \$1,726,850 county bonds of

various counties of California ($4\frac{1}{2}$ to 8 per cent). The interest of this permanent fund, together with the interest on deferred payments on school lands sold, and the amount derived from State, county, and railroad taxes, constitute the State school revenue. To ascertain the total amount of revenue for school purposes in the State, we must add to the above the amount derived from the taxes levied for school purposes by the various cities and school districts of the State, and the amount received from poll taxes.

Total receipts from all sources in 1889	\$6,097,663 72
Total receipts from all sources in 1890	6,118,412 86
Total expenditures 1889	\$4,061,317 26
Total expenditures 1890	5,119,096 68
Total expenditures for two years	\$9,180,413 94

Add to this \$208,250 for the improvement and support of the three State Normal Schools, and we have the grand total expended in the State in two years for the cause of education, exclusive of the amount expended for the support of the State University, of \$9,388,663 94.

The total valuation of the property of the State for 1890, including railroads, according to the report of the Secretary of the State Board of Equalization, is \$1,115,014,022, and the rate of State tax is $19\frac{1}{2}$ cents on each \$100 valuation for the support of the common schools, and seven tenths of one cent on each \$100 valuation for the Grammar School Course (High) Schools in districts which have voted to adopt such course.

The details of receipts and expenditures will appear more fully in the statistical tables which follow in another part of this report.

The revenue from the State for the support of the State University is 1 cent on each \$100 property valuation. It has besides this, the interest on its endowment funds, and the Federal Fund granted to Agricultural Colleges.

EVIDENCES OF PROGRESS.

The following figures and comparative statements concerning the condition of the public schools and the progress made therein during the years ending June 30, 1889, and June 30, 1890, will show something of the results of the work done:

I. CENSUS STATISTICS.

1. ENUMERATION OF CHILDREN.

	1889.	1890.
Number of white boys between the ages of 5 and 17 years	137,174	140,130
Number of white girls between the ages of 5 and 17 years	134,292	136,665
Number of white children between the ages of 5 and 17 years	271,466	276,795
Number of white children between the ages of 5 and 17 years in 1888		266,898
Increase over 1888		9,897
Number of negro boys between the ages of 5 and 17 years	874	921
Number of negro girls between the ages of 5 and 17 years	879	914
Number of negro children between the ages of 5 and 17 years	1,753	1,835
Number of negro children between the ages of 5 and 17 years in 1888		1,643
Increase over 1888		192

CENSUS STATISTICS—Continued.

	1889.	1890.
Number of Indian boys between the ages of 5 and 17 years	410	470
Number of Indian girls between the ages of 5 and 17 years.	319	381
Number of Indian children between the ages of 5 and 17 years	729	851
Number of Indian children between the ages of 5 and 17 years in 1888.		676
Increase over 1888.....		175
Number of native born Chinese boys between the ages of 5 and 17 years.....	797	791
Number of native born Chinese girls between the ages of 5 and 17 years.....	557	610
Number of native born Chinese children between the ages of 5 and 17 years.....	1,354	1,401
Number of native born Chinese children between the ages of 5 and 17 years in 1888.....		1,283
Increase over 1888.....		118
Number of census children between the ages of 5 and 17 years.....	275,302	280,882
Number of census children between the ages of 5 and 17 years in 1888.....		270,500
Increase over 1888.....		10,382
Number of white children under 5 years of age.....	102,845	104,901
Number of negro children under 5 years of age.....	625	629
Number of Indian children under 5 years of age.....	223	227
Number of Chinese children under 5 years of age.....	481	545
Total number of children under 5 years of age.....	104,174	106,302
Total number of children under 5 years of age in 1888.....		98,203
Increase over 1888.....		8,099
Total number of children under 17 years of age.....		387,184

The percentage of increase and decrease of census children from 1886 to 1890, is as follows:

From 1886 to 1887, the increase was.....	4.80 per cent.
From 1887 to 1888, the decrease was.....	0.71 per cent.
From 1888 to 1889, the increase was.....	1.77 per cent.
From 1889 to 1890, the increase was.....	2.02 per cent.

2. AT PUBLIC SCHOOLS.

	1889.	1890.
Number of white children who attended public schools at any time during the school year.....	193,696	197,261
Number of negro children who attended public schools at any time during the school year.....	1,143	1,294
Number of Indian children who attended public schools at any time during the school year.....	241	311
Number of Chinese children who attended public schools at any time during the school year.....	149	94
	195,229	198,960
Average number of children belonging to the public schools	154,459	158,070
Increase over 1888.....		15,714
Average daily attendance of children.....	143,733	146,589
Increase in the average attendance over 1888		14,362

CENSUS STATISTICS—Continued.

	1889.	1890.
Percentage of average number belonging on total number enrolled ..	71.54	71.28
Percentage of average number belonging on total number enrolled in 1888		68.75
Increase over 1888		2.53
Percentage of average daily attendance on total number enrolled ...	66.57	66.10
Percentage of average daily attendance on total number enrolled in 1888		63.86
Increase over 1888		2.24
Percentage of average daily attendance on average number belonging	93.05	92.73
Percentage of average daily attendance on average number belonging in 1888		92.88
Decrease from 1888		0.15
Percentage of daily attendance on total number of census children ..	52.21	52.19
Percentage of daily attendance on total number of census children in 1888		48.88
Increase over 1888		3.31

The following table exhibits the percentage of daily attendance, average number belonging, and enrollment from 1886 to 1890:

YEAR.	Listed on Census.	Enrolled in Public Schools.	Per-centage Enrolled.	Average Number Belonging to Public Schools.	Per-centage.	Average Daily Attendance.	Per-centage.
1886	259,973	189,220	72.77	135,657	52.18	125,718	44.51
1887	272,448	196,907	72.27	138,640	50.89	129,297	47.46
1888	270,500	207,050	76.54	142,356	52.61	132,227	48.88
1889	275,302	215,905	78.42	154,459	56.11	143,753	52.21
1890	280,882	221,756	78.95	158,070	56.28	146,589	52.19

3. AT PRIVATE SCHOOLS.

	1889.	1890.
Number of white census children who attended only private schools at any time during the school year	20,293	20,944
Number of negro census children who attended only private schools at any time during the school year	33	32
Number of Indian census children who attended only private schools at any time during the school year	12	16
Number of Chinese census children who attended only private schools at any time during the school year	706	468
Total number of census children who attended only private schools at any time during the school year	21,044	21,460
Increase over 1888		692
Percentage of census children who attended only private schools.	7.64	7.64
Percentage of census children who attended only private schools in 1888		7.68
Decrease from 1888 .....		.04

Percentage of census children who attended only private schools from 1886 to 1890:

YEAR.	Listed on Census.	Enrolled in Private Schools.	Percentage.
1886.....	259,973	18,919	7.22
1887.....	272,448	22,661	8.32
1888.....	270,500	20,768	7.68
1889.....	275,302	21,044	7.64
1890.....	280,882	21,460	7.64

4. NOT ATTENDING ANY SCHOOL.

	1889.	1890.
Number of white census children who did not attend any school during the school year.....	57,477	58,590
Number of negro census children who did not attend any school during the school year.....	577	509
Number of Indian census children who did not attend any school during the school year.....	476	524
Number of Chinese census children who did not attend any school during the school year.....	499	839
Total number of census children who did not attend any school during the school year.....	59,029	60,462
Percentage of census children who did not attend any school during the school year.....	21.44	21.53
Percentage of census children who did not attend any school during the school year of 1888.....		22.63
Decrease from 1888.....		1.15

While it appears from the above table that 60,462, or 21.53 per cent of the census children, did not attend any school during the year ending June 30, 1890, and are seemingly growing up without education, it must be remembered that there are a large number of census children between five and six years of age who may be and really are excluded by Trustees, under the law, from attending the public schools. There are also a large number between ten and seventeen years of age who are absent because of their home circumstances, and a considerable number are kept away from school for a longer or shorter time by ill health. Still, I am constrained to believe that many of these 60,462 children above mentioned should be found in some school in the State, and that their parents or guardians should be compelled, by a wholesome compulsory educational law, to keep them there, at least till they have acquired the rudiments of education.

Since 1866 the non-attendance of census children has been as follows:

YEAR.	Listed on Census.	Attended no School.	Percent- age.
1866.....	85,152	21,771	25.57
1867.....	94,349	21,441	22.62
1868.....	102,183	23,583	23.08
1869.....	110,642	25,464	23.01
1870.....	121,751	27,067	22.23
1871.....	130,116	29,459	22.64
1872.....	137,351	30,781	22.41
1873.....	141,610	31,422	22.19
1874.....	159,717	39,678	24.84
1875.....	171,563	39,646	23.11
1876.....	184,787	43,023	23.29
1877.....	200,067	49,035	24.51
1878.....	205,475	50,674	24.66
1879.....	216,404	56,369	26.05
1880.....	215,978	52,140	24.17
1881.....	211,237	47,469	22.42
1882.....	216,330	49,541	22.90
1883.....	222,846	49,537	22.23
1884.....	235,672	53,552	22.72
1885.....	250,097	57,254	22.89
1886.....	259,973	56,957	21.90
1887.....	272,448	66,264	24.32
1888.....	270,500	61,345	22.68
1889.....	275,302	59,029	21.44
1890.....	280,882	60,462	21.53

RECAPITULATION.

	1889.	1890.
Total number of census children who attended public schools at any time during the school year.....	195,229	198,960
Total number of census children who attended only private schools at any time during the school year.....	21,044	21,460
Total number of census children who did not attend any school during the school year.....	59,029	60,462
Percentage of census children enrolled in public schools.....	70.92	70.83
Percentage of census children enrolled in private schools.....	7.64	7.64
Percentage of census children who did not attend any school.....	21.44	21.53

It should be borne in mind that some pupils attend school for a few days only, and do not return again during the year. The number in the daily average attendance is in many cases considerably less than the total number enrolled. Therefore, to ascertain the true extent to which the children of the State utilize the public schools, the calculation should be made on the *average number belonging*. We shall then have the following table:

	1889.	1890.
Number of census children belonging to public schools.....	154,459	158,070
Number of census children belonging to private schools.....	21,044	21,460
Number of census children not attending any school.....	59,029	60,462
Percentage of census children belonging to public schools.....	65.86	65.87
Percentage of census children belonging to private schools.....	8.97	8.94
Percentage of census children not attending any school.....	25.17	25.19

5. NATIVITY OF CHILDREN UNDER 17 YEARS OF AGE.

	1889.	1890.
Native born children, both parents native born.....	199,617	204,947
Native born children, one parent native born.....	54,100	56,317
Native born children, both parents foreign born.....	116,381	116,351
Foreign born children.....	9,378	9,569
Percentage of children of native born parents.....	52.60	52.93
Percentage of children, one parent foreign born.....	14.25	14.55
Percentage of children, both parents foreign born.....	33.15	32.52

II. SCHOOL STATISTICS.

	1889.	1890.
<i>1. Number of Districts and Schools.</i>		
Number of school districts	2,811	2,871
Number of school districts in 1888.....		2,712
Increase over 1888.....		159
Number of High Schools	21	24
Number of Grammar School Course Schools.....	41	55
Number of Grammar Schools.....	1,497	1,630
Number of Primary Schools.....	2,765	2,858
Total number of schools.....	4,324	4,567
Total number of schools in 1888.....		4,002
Increase over 1888.....		565
Number of school houses built of brick, stone, or adobe.....	102	115
Number of school houses built of wood.....	2,895	3,006
Total number school houses.....		3,121
Number of school houses erected	218	163
Number of school houses erected in 1888.....		154
Increase over 1888.....		9
<i>2. School Attendance.</i>		
Whole number of boys on school register.....	110,880	114,064
Whole number of girls on school register.....	105,025	107,692
Total number enrolled	215,905	221,756
Total number enrolled in 1888		207,050
Increase over 1888.....		14,706
Average number belonging	154,459	158,070
Average number belonging in 1888		142,356
Increase over 1888.....		15,714
Average daily attendance	143,733	146,589
Average daily attendance in 1888		132,227
Increase over 1888.....		14,362
Number enrolled in High Schools and advanced grade	2,928	3,548
Number enrolled in Grammar School Course Schools.....	2,194	3,558
Number enrolled in Grammar Schools.....	49,708	52,186
Number enrolled in Primary Schools	161,075	162,464
Total number enrolled	215,905	221,756
Total number enrolled in 1888		207,050
Increase over 1888.....		14,706

SCHOOL STATISTICS—Continued.

	1889.	1890.
Percentage of pupils in High Schools	1.35	1.60
Percentage of pupils in Grammar School Course Schools	1.02	1.60
Percentage of pupils in Grammar Schools	23.02	23.54
Percentage of pupils in Primary Schools	74.61	73.26
<i>3. Length of School Terms.</i>		
Districts maintaining schools less than six months	30	53
Districts maintaining schools less than six months in 1888		29
Increase (principally caused by floods and storms of the winter of 1889-90)		24
Districts maintaining six months or over, but less than eight months	632	723
Districts maintaining six months or over, but less than eight months in 1888		872
Decrease (principally caused by floods and storms in the winter of 1889-90)		149
Districts maintaining school eight months or over	2,119	2,090
Districts maintaining school eight months or over in 1888		1,782
Increase over 1888		308
Average number of months schools were maintained in all the schools of the State	8.02	7.88
Average number of months schools were maintained in all the schools of the State in 1888		7.61
Increase over 1888 .....		.27
Average number of days schools were maintained in all the schools of the State	16,040	15,760
Average number of days schools were maintained in all the schools of the State in 1888		15,220
Increase over 1888		540
<i>4. Teachers and Salaries.</i>		
Number of male teachers	1,151	1,162
Number of male teachers in 1888		1,086
Increase over 1888		76
Number of female teachers	4,104	4,272
Number of female teachers in 1888		3,852
Increase over 1888		420
Total number of teachers	5,255	5,434
Total number of teachers in 1888		4,938
Increase over 1888		496
Average monthly salary paid to male teachers	\$78 23	\$80 70
Average monthly salary paid to male teachers in 1888		79 46
Increase over 1888		\$1 24
Average monthly salary paid to female teachers	\$65 13	\$66 20
Average monthly salary paid to female teachers in 1888		64 55
Increase over 1888		\$1 65

SCHOOL STATISTICS—Continued.

	1889.	1890.
Number of teachers who subscribe for some educational journal.....	3,441	3,794
Increase over 1888.....		948
Number of teachers who are graduates from California State Normal Schools.....	840	966
Increase over 1888.....		239
Number of teachers who are graduates from other Normal Schools.....	521	354
Increase over 1888.....		89
Total increase in the number of teachers who are graduates from Normal Schools over 1888.....		328
<i>5. County Superintendents.</i>		
Number of school visits made by County Superintendents.....	5,954	5,964
Number of school visits made by County Superintendents in 1888.....		5,133
Increase over 1888.....		831
Number of city and county certificates granted to males.....	454	468
Number of city and county certificates granted to females.....	1,379	1,530
Number of city and county certificates renewed.....	592	1,106
Number of applicants for certificates rejected.....	1,205	893
Amount of salaries paid County Superintendents.....	\$66,265 00	\$68,065 00
Amount of salaries paid County Superintendents in 1888.....		66,145 00
Increase (caused by the creation of Orange County).....		\$1,920 00
Average annual salary paid to County Superintendents.....	\$1,274 33	\$1,284 25
<i>6. Condition of School Houses, Apparatus, etc.</i>		
Districts having suitable accommodations for all pupils attending school.....	2,285	2,624
Districts not having suitable accommodations for all pupils attending school.....	274	218
Districts whose schools are provided with water-closets.....	2,494	2,637
Districts whose schools are not provided with water-closets.....	269	204
Districts whose schools have sufficient grounds.....	2,623	2,639
Districts whose schools have not sufficient grounds.....	222	202
Districts whose grounds are suitably improved.....	1,309	1,401
Districts whose grounds are not suitably improved.....	1,455	1,440
Districts whose school houses are well ventilated.....	2,611	2,747
Districts whose school houses are not well ventilated.....	153	104
Districts whose school houses are supplied with good furniture.....	2,021	2,104
Districts whose school houses are supplied with passable furniture.....	379	432
Districts whose school houses are supplied with poor furniture.....	360	310
Districts whose schools are well supplied with apparatus.....	1,473	1,641
Districts whose schools are passably supplied with apparatus.....	821	925
Districts whose schools are poorly supplied with apparatus.....	456	380
<i>7. District School Libraries.</i>		
Number of volumes in district libraries.....	460,298	505,392
Increase over 1888.....		77,050
<i>8. School Visits.</i>		
Number of visits made by County Superintendents.....	5,954	5,964
Number of visits made by Trustees.....	15,925	16,428
Number of visits made by other persons.....	116,281	130,385
<i>9. Teachers' Institutes.</i>		
Number of Institutes held.....	46	45
Number of Institutes held in 1888.....		43
Number of teachers who attended Institutes.....	4,811	4,995
Number of teachers who attended Institutes in 1888.....		4,364
Increase over 1888.....		631

III. FINANCIAL STATISTICS.

	1889.	1890.
<i>1. Receipts.</i>		
Balance on hand at beginning of school year.....	\$810,918 82	\$1,099,514 30
Received from State apportionments.....	2,507,483 35	2,627,470 59
Received from county apportionments.....	1,289,074 10	1,320,904 25
Received from city and district taxes.....	1,153,180 54	972,431 50
Received from miscellaneous sources.....	337,006 91	98,092 22
Total receipts.....	\$6,097,663 72	\$6,118,412 86
Percentage from State apportionments.....	41.12	42.95
Percentage from county apportionments.....	21.14	21.59
Percentage from city and district taxes.....	18.91	15.89
Percentage from balance on hand and miscellaneous sources.....	18.83	19.57
Amount of State apportionments per census child.....	\$9 11	\$9 36
Amount of State apportionments per census child in 1888.....		8 01
Increase over 1888.....		\$1 35
Amount of county apportionments per census child.....	\$4 68	\$4 70
Amount of county apportionments per census child in 1888.....		4 12
Increase over 1888.....		\$0 58
Amount of city and district taxes per census child.....	\$4 19	\$3 46
Amount of city and district taxes per census child in 1888.....		3 90
Decrease from 1888.....		\$0 44
Amount apportioned from balance on hand and miscellaneous sources.....	\$4 17	\$4 26
Amount apportioned from balance on hand and miscellaneous sources in 1888.....		2 94
Increase over 1888.....		\$1 32
Total receipts per census child.....	\$22 15	\$21 78
Total receipts per census child in 1888.....		18 97
Increase over 1888.....		\$2 81
<i>2. Expenditures.</i>		
Amount paid for salaries.....	\$3,343,191 80	\$3,594,588 98
Amount paid for rents, repairs, and contingent expenses.....	624,810 95	706,995 12
Amount paid for school libraries.....	59,522 72	71,121 94
Amount paid for school apparatus.....	33,791 82	42,442 85
Total current expenses.....	\$4,061,317 29	\$4,415,148 89
Amount paid for sites, buildings, and school furniture.....	935,548 42	703,947 79
Total expenses.....	\$4,996,865 71	\$5,119,096 68
Percentage of current expenses for teachers' salaries.....	82.32	81.42
Percentage of current expenses for contingent expenses.....	15.38	16.01
Percentage of current expenses for school libraries.....	1.47	1.61
Percentage of current expenses for school apparatus.....	.83	.96
Cost of tuition per scholar enrolled in the public schools (teachers' salaries, rents, repairs, etc., libraries, and apparatus).....	\$18 81	\$19 91
Cost of tuition per scholar enrolled in the public schools (teachers' salaries, rents, repairs, etc., libraries, and apparatus) in 1888.....		17 87
Increase over 1888.....		\$2 04

FINANCIAL STATISTICS—Continued.

	1889.	1890.
Cost of tuition per scholar, average number belonging (teachers' salaries, rents, repairs, etc., libraries, and apparatus).....	\$26 29	\$27 93
Cost of tuition per scholar, average number belonging (teachers' salaries, rents, repairs, etc., libraries, and apparatus) in 1888		25 98
Increase over 1888		\$1 95
Cost of tuition per scholar, average daily attendance (teachers' salaries, rents, repairs, etc., libraries, and apparatus).....	\$28 25	\$30 12
Cost of tuition per scholar, average daily attendance (teachers' salaries, rents, repairs, etc., libraries, and apparatus) in 1888		27 97
Increase (caused principally by the creation of new small districts).....		\$2 15
<i>3. Valuation of School Property.</i>		
Valuation of sites, school houses, and furniture	\$12,031,278 00	\$12,746,308 00
Valuation of school libraries.....	540,828 00	579,659 00
Valuation of school apparatus.....	272,664 00	298,176 00
Total valuation	\$12,844,770 00	\$13,624,143 00
Total valuation in 1888		10,563,780 00
Increase over 1888		\$3,060,363 00

A brief analysis of the preceding figures will show that there was expended about 15 per cent more for all purposes in conducting the public schools for the year ending June 30, 1889, than for the year ending June 30, 1888. For this increased expenditure, the State has two hundred and eighteen new school houses erected during the year, and the schools must be credited with a daily average attendance of eleven thousand five hundred and six more pupils than attended the public schools in the year ending June 30, 1888, and an average increase in the length of school terms of nearly two weeks.

It shows an increase of 2 per cent in the number of teachers who have had professional training for their work in Normal Schools; and strong evidence that our teachers are more than ever determined to keep up with the times, and strengthen their professional standing, is shown by their increased attendance at County Institutes, and by the greater number (five hundred and ninety-five) who subscribe for and read some educational journal.

That School Trustees are more attentive to their duties is indicated by the increased number of visits (three thousand four hundred and twenty-seven) made by them to the schools; and the eighteen thousand and twelve more visits by parents and friends of the pupils bespeak an augmented interest amongst the people in the work of education; while County Superintendents have shown a growing appreciation of their duties by making eight hundred and twenty-one more visits than during the previous year.

A careful observation of the comparative table for 1889 and 1890 will show that the percentage of attendance on the average number belonging, in 1890, was only 1 per cent less than in 1889; that one hundred and eighty-four more teachers attended Institutes; that County Superintendents made ten more visits; that Trustees made five hundred and three

more visits; that parents, guardians, and friends made fourteen thousand one hundred and four more visits in 1890 than in 1889; that there were one hundred and sixty-three new school houses erected; that three hundred and fifty-three more teachers subscribed for educational journals. The decrease of 1 per cent in the percentage of attendance, and the shortening of the average length of the school term throughout the State by two and eight tenths days, was caused by the floods and storms of the severe winter of 1889-90. It is indeed surprising that more disastrous results did not come from this source.

The foregoing figures and statements, compiled from the reports of County Superintendents, together with my own extensive and careful observations in the Institutes and class-rooms, constrain me to congratulate the people of California upon the fact that the schools of the State were never in better condition than at present; that the Superintendents and teachers never evinced a better spirit of emulation, nor a stronger determination to excel in their work. Therefore, never before have the people received a larger equivalent for the money expended in conducting the public schools.

REASONS FOR THE GOOD CONDITION OF OUR PUBLIC SCHOOLS.

First—California pays her teachers a higher average salary than any other State in the Union.

Second—She requires a higher average standard in the qualifications of her teachers, and, by law, she pays to women teachers the same salary as to men, when doing the same or similar work.

Third—The superior method of school supervision, heretofore mentioned.

Fourth—An increasing interest evinced by parents and the general public in school work, and a much greater attention and encouragement given by the public press of the State, which has created a better school sentiment and a higher appreciation of the value of our public schools.

I am convinced that the various courses of study in operation throughout the State are too crowded, and that our schools would be still better than they are now if the amount of work were reduced, or the time for completing it extended one year.

COMPULSORY EDUCATION.

Again it seems necessary to refer to the desirability of a compulsory education law, whose provisions can and will be enforced.

Our present law has been so long inoperative, that people are not awake to the imperative importance of this point. If the State furnishes free education as a safeguard to itself, the results aimed at are not attained unless all children receive the benefits provided.

The indifference, greed, or dissoluteness of parents and guardians, should not be allowed to form a barrier to these results. If good citizens are desired, the children must be trained in the principles which make good citizens, or they will surely make bad ones. The State has a right to see that this is done, that her future well-being is not jeopardized.

Continental nations have enacted the strictest laws requiring all children of certain ages to attend school. As a nation, we have been lax in

this respect. About 22 per cent of the children in our State attend no school.

It should here be remembered that the children between the ages of five and six years are not admitted to the public schools, although they are included in the census rolls. Positive and effective measures should be taken to suppress this evil, or it may prove to be a leak that may imperil the safety of the entire ship.

SCHOOL ACCOMMODATIONS.

At the time of the last report there were several parts of the State, especially in the south, which were sadly lacking in school accommodations. This condition was brought about by a rapid and large immigration to those localities. The people, however, have been equal to the situation, and wherever increased facilities are needed there have been, as a rule, efforts made to meet the demands, and some of the new buildings are models of architectural beauty without, and arranged within with some degree of comfort for both teachers and pupils. There are still some districts where the school buildings stand like a blot on the face of Nature. These should give place to better buildings, which should be made attractive by beautifying the surroundings.

COUNTY INSTITUTES.

In all counties having twenty districts or more the law makes a yearly County Institute imperative. The session is from three to five days, attendance is compulsory, and salaries are continued.

As a whole, the Institutes during the past two years have been satisfactory. The majority of the teachers have shown an interest, an enthusiasm, an ability, and, above all, a wish for progress that bodes well for the results desired.

There are still some, however, who cannot yet see that such meetings are limited Normal Schools, wherein much might be garnered suitable for their work, did they have professional spirit and appreciative minds.

The revocation of certificates for non-attendance, in a few instances, has had the effect of emphasizing, in the minds of the teachers, the importance of the law. At some of the Institutes the attendance of parents and Trustees was gratifying. Two counties included a "Trustees' Day" in their programs, with good results. I cannot commend too highly the energy displayed by most of the Superintendents in the conduct of their Institutes in maintaining a perfect and prompt attendance, in requiring some exercise or discussion from every member, and in preparing such programs as would be both interesting and beneficial.

Exhibits of school work have been displayed in a number of counties that stimulates a generous rivalry and determination for still better work in the future.

A great improvement in the work of the Institutes would be to drop many of the addresses and supply their place with discussions and class exercises. In many places, too, I should, in fact, be in favor of foregoing some of the evening lectures, which absorb so large a part of the Institute Fund; believing that where faithful attendance and preparation is given by the teachers to the daily sessions, the evenings should as a rule be free for rest or social intercourse.

The great majority of teachers are non-receptive to abstract pedagogics. They demand subject-matter illustrative of principles and methods and filled with practical detail. For this reason a lesson given to a class of children, or, considering a number of the teachers as a class, is especially valuable.

But since the advanced methods of instruction are based upon the natural laws of mind, and a clear understanding of them, it is well to introduce to teachers' attention the importance to them of psychological study, and urge them to investigation and practice of its principles.

When properly conducted, the Teachers' Institute is a power for good to our schools. Here may be obtained a knowledge of the condition of other schools in the county, and a comparison may stimulate to do better work, or encourage in the pursuance of work already well begun. The experience of older and more progressive teachers can be listened to and adapted, as the needs of different neighborhoods may require. And more than all, here may be found the sympathy which makes a teacher feel the strength and power of association—that strong hands and willing hearts are helping her, even as she is willing to give help in return. A new importance is given to the work, and renewed zeal and earnestness are garnered for the future.

The law requiring Trustees to pay teachers for Institute week should never be evaded, and it is to be regretted, that for this purpose the terms are occasionally purposely fixed so as to bring this week into the vacation.

Still greater good could be accomplished at Institutes were our law so amended as to admit of employing competent and regularly appointed conductors. In this way, the poorer and more remote counties would receive equally as good instruction as those which are better equipped. These conductors should be appointed by the State Board of Education, and the State Superintendent should have a voice in fixing the time for holding the Institute.

The practice of requiring the legal fee of \$2 for *renewed* certificates is not uniform throughout the State. It *should* be. The requirement is a just one, and the purposes to which the money is applied, viz.: the Institute Fund and Teachers' Library, are important.

INSTITUTE PROGRAM.

The accompanying program is herewith printed as a sample of the exercises of our County Teachers' Institutes:

MARIN COUNTY TEACHERS' INSTITUTE FOR 1890.

INSTRUCTORS.

L. D. P. Syle, A.M.	Yale College.
Prof. Will S. Monroe	City Superintendent, Pasadena.
Hon. Ira G. Hoitt	Superintendent of Public Instruction.
Robert Furlong	County Superintendent.

ORDER OF EXERCISES.

MONDAY.

1:15 P. M.—Roll call. Organization.

The following officers and committees are appointed, subject to approval by Institute:
C. S. Smyth, Miss May Cooper, Vice-Presidents; W. R. Hussey, Secretary.

Resolutions.—F. E. Crofts, J. B. Davidson, and E. L. Collins.

Music.—Miss Belle C. Brown, F. E. Crofts, and chosen assistants.

Introductory address, by Superintendent Robert Furlong.

How to Make Institutes Most Beneficial, by L. D. P. Syle.

Recess.

Written examination in school law, conducted by County Superintendent of Schools.

TUESDAY.

9 A. M.—Roll call.

Reading of minutes.

School Government, by L. D. P. Syle.

Hints for Primary Work, by Miss A. A. Gates.

Arithmetic for lower grades, by James B. Davidson.

Recess.

Arithmetic, by L. D. P. Syle.

Method in Percentage, by R. B. Warren.

Afternoon.

1:15.—Music. Roll call.

Address, by Hon. Ira G. Hoitt.

Forestry, Arbor Day Observance, by E. L. Collins.

Notes from a Country District, by Miss K. A. Chandler.

Temperance Lessons for Little Folks, by Miss Agnes Stowell.

Recess.

Advanced Primary Geography, by Miss L. G. Atwater.

County Map Drawing, by Miss K. C. Batchelder.

Aids and Manner of Teaching Geography, by L. D. P. Syle.

Evening Lecture—7:45.

Travels in the Old World, by L. D. P. Syle.

WEDNESDAY.

9 A. M.—Roll call.

Reading of minutes.

A Teacher's Equipment in History, by L. D. P. Syle.

First Lessons in United States History, by Miss Belle C. Brown.

Spelling for Primary Pupils, by Miss M. E. Norton.

Recess.

Supplemental Work for Little Fingers, by Miss Florence A. Ellis.

Kindergarten Methods in Primary Schools, by L. D. P. Syle.

Afternoon.

1:15.—Roll call.

Memorial exercises; tribute to the memory of Miss Gazena A. Garrison, died November, 1889, by Miss M. B. Palmerlee.

What Makes a Great Country and Good Citizens, by L. D. P. Syle.

Recess.

Drawing, by Miss May Cooper.

Literature, by L. D. P. Syle.

THURSDAY.

9 A. M.—Roll call.

Reading of minutes.

The Child we Teach, by Will S. Monroe.

Things Neglected, by A. G. Burnett.

Recess.

Language Work and General Exercises, by Will S. Monroe.

Afternoon.

1:15.—Roll call.

What Teachers Should Read, by Will S. Monroe.

Quotations—Class Exercise, by Miss Mary Farrell.

Manners and Morals, by Will S. Monroe.

Recess.

Some Studies in Natural History, by W. R. Hussey.

Science Teaching, by Will S. Monroe.

FRIDAY.

9 A. M.—Roll call.

Reading of minutes.

School Discipline, by Will S. Monroe.

"Section 1702," by J. M. Kirkpatrick.

Elementary Geometry, by F. E. Crofts.

Recess.

Educational Work in the Older States, by Miss M. Augustine.
Geography and Sand Modeling, by Will S. Monroe.

Afternoon.

1:15.—Roll call.
A Plea for Higher Education, by C. S. Smyth.
Reading and Thought Getting, by Will S. Monroe.

Recess.

Supplementary Reading, by Will S. Monroe.
Reports of committees.
Adjournment—4 P. M.

Some City Superintendents have established the custom of holding bi-monthly Institutes on Saturday, and it has invariably resulted in raising the grade of teaching and the qualifications of the teachers.

Having visited a large number of County Teachers' Institutes and met and conferred with a majority of the teachers of the State, and noted the ability and intelligence with which they have discussed educational questions, I have no hesitation in saying that our teachers generally are thoughtful, earnest, educated men and women, and that as a whole they are doing thorough, honest work. From what I know of the requirements of teachers in other States, and the work done by them, I am persuaded that no State in the Union has a better corps of teachers, as a whole, than California.

The amount expended in conducting the Institutes in forty-five counties during the fiscal year ending June 30, 1890, was \$6,133 83, and it is believed that a full equivalent therefor will be found in the improved methods of work done in the schools.

COUNTY SUPERINTENDENCY.

The importance of efficient school supervision can scarcely be over-estimated. The supervision of the county school, with its innumerable duties, carries with it bane or blessing as the case may be. The County Superintendent must be a mine of suggestion; for the improvement of methods of teaching he must be a mentor, gentle but firm, to warn the indolent, the ignorant, or the injudicious of their errors; his temper must be like Damascus steel and his constitution like iron. His influence is more extended than that of any other county officer, and his responsibilities more weighty.

For this reason he should be elected with special reference to his fitness for the office, which should be entirely removed from the contamination of partisan politics. An educational and moral qualification should be required, regardless of party affiliations, and no candidate should be accepted who fell short of the standard.

It would be a step towards the improvement and protection of school superintendencies if the elections therefor could be held at a different time from those of other officers, as was formerly the case here.

The Constitution would have to be amended to bring this about, but the result would justify such action.

The State Superintendent of Minnesota gives his opinion on this point in these words:

"Because, therefore, of the importance of this office, I must again call attention to the serious embarrassments which Superintendents of

counties suffer in being chosen at popular elections, at times when all the agencies of party prejudice, personal enmities, and personal ambitions conspire to obscure a sound judgment, and prevent a careful selection of an officer who is thoroughly competent to discharge the duties of the office. As a result, efficient Superintendents are often displaced when most useful, and the best are greatly tempted to secure themselves in their positions by methods more political than educational. All these things detract from the character of the position, and often create artificial barriers to usefulness."

During the past four years California has been favored with a rarely efficient body of County Superintendents, seven of them being women, not one whit behind the men in energy and fidelity to their duties.

By association and correspondence I have known of their labors, and am sure that they have shown an untiring energy, an ambition to accomplish the best results, and an integrity of purpose worthy of the highest commendation.

It is the letter and the intent of our law to give all Superintendents their traveling expenses, but it is a pitiful fact that in some counties this plain obligation of the statute is disregarded, and the expenses incurred in the faithful discharge of their legal duties are not reimbursed.

"About the worst use to which we can put a County Superintendent," says an eastern educator, "is to confine him within the walls of his office, doing the work which a clerk could do as well, while he, himself, ought to be out among his schools, directing, encouraging, stimulating, everywhere making his influence felt by his energy and enthusiasm."

And it follows that visits and inspection would be more serviceable and thorough if not circumscribed by economical calculations made necessary by an already too limited income. Besides this, a good Superintendent can perform an important work with the parents and citizens generally. He can broadcast ideas on the importance of education, and the benefits it will bring to the individual, the family, and the State. He can aid their efforts to increase the opportunities of their children for a better education, and guide them into the most profitable channels. He can impress upon parents and Trustees the necessity of prompt and regular attendance, the injury and loss resulting from the employment of incompetent teachers, the importance of some degree of patriotic instruction, and can, in short, impart an intelligence regarding education that will be reflected in the well-being of the schools.

In fact, a County Superintendent should be a man or woman of infinite tact, of high intelligence, of varied resources, of indomitable energy, of unflinching enthusiasm, courteous firmness, and unimpeachable habits.

BIENNIAL CONVENTION OF COUNTY SUPERINTENDENTS.

There was an attendance at the Biennial Convention, December, 1888, of thirty-four County Superintendents. The difficulties of travel from the more remote counties, in the winter season, offered a reasonable excuse for some absences, but as the law specifies attendance at this meeting as one of the duties of a County Superintendent, and provides for his expenses, it is to be regretted that some who were in reasonable traveling distance did not present themselves.

The session was one of more than ordinary importance. The entire

school law was taken up section by section, and amendments suggested wherever experience had proved the law to be defective. A committee of Superintendents was then appointed to embody the proposed changes in a bill to be presented to the coming Legislature. The work was faithfully performed and the bill was finally passed.

Some of its new provisions are as follows:

IMPORTANT LEGISLATION.

State Board of Education meets four times a year, instead of twice. Thirty-five months of teaching, extended through five calendar years, are fixed as the experience required of applicants for State educational diplomas. Seventy months of teaching, extended through ten calendar years, are fixed as the experience required of applicants for State life diplomas.

A delegate from each County Board of Education is permitted to attend the Biennial Convention of County Superintendents.

The fee for county certificates is raised from \$1 to \$2, and one half of the fund so accumulated is devoted to the purchase of a teachers' reference library.

The time of forming new school districts is restricted to the time between January first and May tenth, and the distance from any school house of the residence of petitioners for same is increased to *two* miles.

It is made incumbent upon School Trustees to appoint janitors.

The pay of Census Marshals is fixed not to exceed \$6 per day, and a per capita compensation for such service is specially forbidden.

It is made one of the specific duties of the District Clerk to place the educational journal designated as the official organ of the Department of Public Instruction in the school library each month.

The study of civil government is added to the course of instruction.

It is required that beginners, in schools having more than two teachers, be taught by teachers of at least two years' experience, or by Normal graduates.

The books and apparatus purchased for district libraries are required to be selected from lists adopted by County Boards, and all districts are required to furnish a stamp for their libraries, with which all books must be stamped and thus identified.

In granting certificates without examination, County Boards are authorized to recognize, at their discretion, Grammar Grades and Grammar School Course certificates from other counties, and San Francisco Normal Class diplomas.

It is now a misdemeanor for any member of a County Board of Education to give special instruction to those preparing for teachers' examinations under his own Board.

District bonds remaining unsold after a period of six months are, upon petition, allowed to be canceled.

Trustees are required to transact all business at regularly called meetings.

The recommendations of the State Superintendent in his biennial report regarding free texts-books, County High Schools, school architecture, and Arbor Day, were warmly indorsed, and the exchanges of personal experiences were very valuable.

The salaries of the Superintendents in a number of the counties were

readjusted and made commensurate with the duties required of such officers. There are still other counties in which the salary should have been raised, but the failure was in consequence of the opposition of the Assemblymen or Senators from those counties.

The following table will show interesting facts concerning the work of the various County Superintendents and their compensation:

COUNTIES.	Number of Square Miles.	Number of School Districts.	Number of Schools.	Number of Teachers.	Number of Census Children.	Salary of Superintendent, to take effect Jan., 1891.	Traveling Expenses.
Alameda	737	54	300	315	22,978	\$4,500	
Alpine	882	4	4	4	99	100	
Amador	565	42	61	71	2,848	600	\$300
Butte	1,765	75	76	104	4,203	1,800	
Calaveras	971	49	56	55	2,409	1,000	100
Colusa	2,300	69	86	86	3,412	1,800	
Contra Costa	734	48	70	70	3,424	1,800	
Del Norte	1,546	8	13	13	497	400	
El Dorado	1,890	55	55	60	2,143	1,500	
Fresno	8,093	114	162	162	6,903	2,000	
Humboldt	4,093	80	123	123	6,223	2,000	
Inyo	10,156	12	13	13	670	400	
Kern	8,100	44	51	51	1,997	1,500	
Lake	1,078	43	43	50	1,838	800	
Lassen	4,750	32	34	33	994	600	
Los Angeles	4,812	103	380	391	23,394	3,000	
Marin	509	34	46	47	2,654	1,650	
Mariposa	1,543	31	34	34	999	500	100
Mendocino	3,562	89	110	103	4,467	1,500	
Merced	1,968	41	41	46	1,647	1,500	
Modoc	4,246	33	33	38	1,507	700	
Mono	2,796	9	10	10	299	400	
Monterey	3,328	85	110	110	4,715	1,650	
Napa	789	52	77	76	3,619	1,600	
Nevada	1,125	47	81	81	4,365	2,000	
Orange	*	33	70	70	4,011	1,800	
Placer	1,429	52	69	69	3,013	1,800	300
Plumas	2,656	26	30	30	998	600	
Sacramento	968	69	173	173	7,835	1,800	300
San Benito	1,056	43	51	51	1,918	1,500	
San Bernardino	21,171	65	118	118	6,397	1,800	
San Diego	14,968	119	202	199	8,613	2,500	
San Francisco	42	12	72	859	61,144	4,000	
San Joaquin	1,370	82	136	134	6,258	2,000	
San Luis Obispo	3,578	90	92	112	4,733	1,500	
San Mateo	459	31	53	51	2,707	1,500	All.
Santa Barbara	2,265	53	86	82	4,429	1,800	
Santa Clara	1,296	74	188	188	12,310	2,000	
Santa Cruz	437	53	100	97	4,918	1,800	All.
Shasta	3,765	90	100	100	3,431	2,000	All.
Sierra	781	24	28	28	1,012	625	All.
Siskiyou	6,078	62	62	68	2,671	1,000	
Solano	828	55	93	93	4,551	1,500	
Sonoma	1,500	133	200	194	8,293	2,000	
Stanislaus	1,500	52	68	68	2,398	1,200	
Sutter	610	37	42	42	1,326	1,200	
Tehama	3,125	61	76	76	2,689	2,000	
Trinity	2,625	16	18	18	804	700	
Tulare	6,406	120	151	147	6,270	1,800	
Tuolumne	1,953	30	36	36	1,586	500	
Ventura	1,682	43	58	57	2,708	1,200	
Yolo	1,017	54	74	76	3,382	1,600	
Yuba	617	39	52	52	2,178	1,400	All.

* Included in Los Angeles County.

DISTRICT SCHOOL LIBRARIES.

"When a person has only learned how to read and not what to read, he is in great peril."—
Charles Dudley Warner.

That there has been great advance in the attention given to and the appreciation of our school libraries during the past two years, is a matter for congratulation. In 1889, four hundred and sixty thousand two hundred and ninety-eight volumes were reported in the libraries, and in 1890 five hundred and five thousand three hundred and ninety-two volumes, showing an increase of forty-five thousand and ninety-four volumes, and in two years of seventy-seven thousand and fifty volumes.

In 1889, the law relating to libraries was amended by specifying that no books or apparatus should be bought with the Library Fund that had not first been adopted by the County Board of Education, and requiring all books to be stamped with the name of the district, county, and State. These two points were of benefit, but it is not to be denied that many abuses are still connected with the expenditure of the Library Fund.

If an expensive and valuable piece of apparatus or set of reference books is adopted by the County Board, because it would be useful and suitable in the highest grades, some enterprising agent will immediately attempt to convince the Trustees of all the schools in the county, Primary or Grammar, small or large, that it is absolutely essential to the well-being of their school, that it should have this particular set of books or piece of apparatus. As a consequence, the modest little fund, which at the maximum is only \$50, is exhausted at once for that which, in many cases, is of no benefit to the children, and they are deprived for a year, perhaps longer, of those books which, if judiciously selected and properly used, would be a potent factor in their education.

Again, many teachers are not sufficiently careful of books or apparatus. A \$50 set of charts has been known to do duty as the side of a woodbox, and dust, dirt, and dark corners have been the portion of many a globe, map, or tellurian that deserved better treatment.

It is a fact, and one much to be regretted, that very many of the district libraries do not even contain a complete file of the reports from this department. Taken from the beginning, they form a valuable history of the progress of education in California. The State expends large sums of money in printing and distributing them to every district, and they should have been carefully preserved.

There are not nearly as many instances as formerly where attempts are made to misappropriate this fund, but it would be better to place its expenditure in the hands of the County Board of Education, whose Secretary visits every school, and knows its needs.

The teachers should be held responsible for the care and custody of the library, and should report upon it at the close of every term before the last month's salary warrant is drawn.

Any expenditure of this money for other than its legitimate purpose, if made known to the State Superintendent, should work a forfeiture of the library apportionment for the succeeding year. The law by which the State establishes these libraries is a wise one, and its utility is recognized by all who have had any extended or successful educational experience.

One of our prominent preachers has said: "A book that starts a young person off in a life career, good or bad, is a power. The inspiration of a single book, or a few, has made preachers, poets, philosophers, authors, and statesmen. On the other hand, the demoralization of a book has sometimes made infidels, profligates, and criminals."

Hence it needs no argument to prove that a taste for wholesome and refining literature is one of the essentials of even a limited education. A carefully educated taste for good books helps largely to make good thinkers, good workers, good men, good citizens, and the law should be carried out to the fullest extent of its letter and its spirit.

CERTIFICATES.

That some change is needed in the certifying of teachers, becomes more apparent year by year.

At present there are fifty-three different standards for examinations, and a Grammar Grade county certificate, once obtained, may be accepted in other parts of the State, but it is by no means certain that it will be.

The consequent "cramming" to obtain certificates, the occasional raising of a Primary to a Grammar Grade, by "resolution of the Board," and the manipulation of the figures so as to produce the needed 85 per cent for a first grade, are existing facts greatly to be deprecated.

That the standard of qualifications throughout the State is generally high is admitted, but one Board will require certain branches while another requires certain other branches. The result is that each Board is naturally tenacious of its own standard and will often refuse to recognize the work of the other. This often brings serious losses and hardships upon worthy teachers.

Superintendent Draper, of New York, than whom there is no more far-seeing and practical educator in the Union, says upon this subject:

In general, we have in this country no proper systems for determining the qualifications of teachers; there are no adequate safeguards against the issuance of certificates to persons having neither the intellectual qualifications, the moral fitness, nor the practical common sense essential to an instructor of youth. When this is not the case, the fact is not due to any system which prevents it being so, but to the superior intelligence of the people of the locality, or to the fact that in some places intelligence has a way of making itself felt in public affairs, to an extent much greater than in others.

If, in California, we are favored with a majority of Educational Boards of superior intelligence, an intelligence that makes them rise above prostituting political influences, the claims of kindred or neighborhood scheming, it is still true that the issuance of certificates should be based on a uniform standard and controlled by a central authority.

If our Constitution were so amended as to produce this change, and the appointment of teachers then given to the County Board, it would be an amazing improvement on the present state of affairs.

Teachers would then be eligible for any part of the State without question; appointments would not be determined by the kinship of the applicant, a promise to board with a Trustee, or a *voluntary* offer to return a part of each month's salary to the treasury, for the ostensible purpose of *repairs*. Contracts would not be foresworn, and terms would not be abridged from personal malice; salaries would be paid in full, and Trustees would work more harmoniously.

One result of our present course has been to put a higher value upon professional training and the possession of Normal School diplomas,

which may be recognized throughout the State without examination. In some of our counties from 50 to 75 per cent of the teachers are Normal graduates, and the demand exceeds the supply. Education will have found its Utopia, when a license showing professional training shall be required from every teacher.

Eastern school journals have lately called attention to the lax methods of issuing certificates and the consequent loss in their value.

Some of the newer States are reported to be far ahead of their older sisters in this respect.

North Dakota, for example, is cited as having framed a law worthy of imitation. The main features of this law are as follows:

The State Superintendent prepares all questions, both county and State, and prescribes rules for their conduct. He shall issue a professional certificate good for life. Such certificate shall be issued only to those who pass a thorough examination in all branches included in the courses of study in the Common and High Schools of the State, including methods of teaching, and shall in no case be granted unless the applicant has had an experience of at least five years, and can instruct and properly manage any High School of the State. Such certificate shall be valid throughout the State. If the holder of a professional certificate shall at any time cease to teach, or be engaged in other active educational work for the space of three years, he shall be liable to a reëxamination and to the cancellation of his certificate.

The Superintendent issues a State certificate, to be valid for five years, known as a Normal certificate. Such certificate shall be issued only to those who have completed the prescribed course of study in one of the Normal Schools of the State, or in a Normal School elsewhere, having an established reputation for thoroughness. Such certificates shall not be granted unless the applicant shall have taught school successfully not less than two years, and shall be valid throughout the State, and the holder shall be authorized to teach in any of the public schools of the State.

The State Superintendent requires a fee of \$5 from each applicant for a professional or Normal certificate, which fee shall be used by him to aid in the establishment and maintenance of teachers' reading circles in the State. He shall revoke at any time any certificate issued in the State for any cause which would have been sufficient ground for refusing to issue the same, had the cause existed or been known at the time it was issued.

A change, too, should take place in the method of issuing our State diplomas, both for the credit of the State and the holders of these credentials.

As issued now, they are predicated wholly upon the action of local Boards and a certain amount of experience; five calendar years' teaching, embracing at least thirty-five months, being required for an educational diploma, good for six years, and ten calendar years' teaching, embracing at least seventy months, being required for a life diploma. It is one of the weak points of our law that it is not essential that any part of this time must have been passed in California schools. Our sister State, Oregon, requires three years' teaching within her borders before granting a life diploma, and our laws ought to require of the holders of the highest educational credentials in the State a certain amount of experience in our own schools.

Again, in order to give these State papers greater force and value, they should properly be issued, as in Illinois, Indiana, New York, and other States, upon examinations, with questions prepared by the State Board of Education, and submitted to applicants by the County Superintendents at certain fixed dates.

This course would give an unquestionable rank and dignity to these papers that would carry weight wherever presented, and be of material assistance in placing the profession of teaching on a firm and acknowledged basis.

Section 1521 of our School Law, Subdivisions 10 and 11, should be amended to this end.

SCHOOL ARCHITECTURE.

During the past two years, three hundred and eighty-one new school buildings have been erected in California, a large number of which are fine specimens of the builder's art and ornaments to their respective neighborhoods.

More attention is given every year to the details of convenience, ventilation, sanitation, and light; but if the State would provide a certain number of plans, containing the latest improvements in these particulars, it would be a great aid to districts which contemplate building, and would also be the means of satisfying the many inquiries for plans that are made to this office.

If it is right for the State to furnish the means of education to its children, it is also right that these means, as far as accommodations are considered, shall be such as will promote health and necessary comfort.

The children are entitled to the needed space, to pure air, proper light, uncontaminated water, sufficient warmth, and seats suited to their size. A well known educator has said: "The public is bound to surround its children with an environment which will promote their intellectual and moral health. Neat, cleanly, wholesome, cheerful rooms, which are free from defacement, of themselves inspire happiness, thrift, punctuality, obedience, and mental and moral vigor. Grounds neatly arranged and well cared for, lead children to wholesome athletic sports as naturally and surely as the sounds of the fife and drum impel the veteran to fall into the measured step of the military parade."

In cities and towns where professional architects are employed, the school buildings generally have been suitable, well arranged, and attractive. In the rural districts, especially, the people have little conception of the importance of the subject, but local pride sometimes produces the desired result.

As was said above, if the State would appropriate a small amount to provide architects' designs for low-priced buildings, with the working drawings, specifications, and estimates, and all the suggestions necessary for properly warming, lighting, and ventilating, it would enable the districts to act more economically and intelligently in the work of constructing school houses.

According to the best authorities, four points are to be considered in the plan of a school-room:

First—And most important, the method by which it is lighted.

Second—The amount of floor space to a pupil.

Third—The ratio of cubic feet of space to a pupil.

Fourth—The methods of heating and ventilation.

Again, the best theories are that the room should be lighted from one side only; that the minimum allowance is fifteen feet of floor space, and two hundred and ten cubic feet of air space, for each pupil; that separate clothes-rooms for each sex should be attached to each room; that the single chair and single desk is the best mode of seating; and that ventilation, except in elaborate buildings where it is furnished by air ducts, should be given by lowering *all* the windows, more or less, *from the top*.

When these points are intelligently provided for, something like an ideal school-room will be obtained.

The many cuts of fine school buildings in different counties, pre-

sented with this report, indicate that local pride and effort have been put forth in the right direction, and, meeting with hearty response by the people, have attained most gratifying results.

ARBOR DAY.

Ye may be aye stickin' in a tree, Jock; it will be growin' when ye're sleepin'.—*The Lair of Dumbiedikes.*

Environment has a most powerful influence in determining character. To the appreciation of this fact is due much of the effort latterly made by our teachers and children towards decorating and making attractive the walls of their school-rooms. The same principle governs the improvement of school grounds. For this reason, and because of the many forlorn and uninviting school premises that I had noticed in traveling through the State, I felt that the establishment of an Arbor Day would be an unconscious lever in the uplifting of moral character, and a physical benefit to these barren places. A recommendation to this effect was made in the previous biennial report, and warmly indorsed in the County Superintendents' Convention, but no action was taken by the Legislature.

In order, therefore, to inaugurate the custom, circulars requesting the local celebration of an Arbor Day were issued from this office and met, wherever it was practicable, with a hearty and active response. The first step taken, others follow more easily, and in the absence of legislation establishing the day, it is hoped that the voluntary observation of its ceremonies will be continued.

To Nebraska belongs the credit of originating this custom. This was done in 1872, since which time thirty-four States and two Territories have established "*Arbor Day*." That the Nebraskans have been hearty in the support of this law is shown by the fact that in sixteen years, according to the report of State Superintendent Geo. B. Lane, no less than three hundred and fifty-five million five hundred and sixty thousand forest, shade, and fruit trees have been planted in that State. (See Exhibit A.)

OUR FLAG.

In addition to the effort made towards the improvement of school grounds, much has been done in the past two years in the inculcation of patriotic sentiments by means of flag-raisings. The seed has been sown in the hearts of thousands of our children that will one day bear the beautiful fruit of Love of Country so strong and perfect that no heat shall wither and no storm shall crush it.

"O Blessed Flag! Sign of our precious past,
Triumphant present, and our future vast,
Beyond starred blue and bars of sunset bright,
Lead us to higher realm of equal right!
Float on, in ever lovely allegory,
Kin to the eagle and wind and light—
Our hallowed, eloquent, beloved 'Old Glory!'"

COUNTY HIGH SCHOOLS.

Since the framers of our Constitution deemed it inexpedient to provide support for any but Primary and Grammar Schools, it is left to the law makers of the present day to establish such measures as will supply the

want, becoming more sensibly felt year by year, of means for a higher education. To the common schools the State extends most generous aid. To the University, an ample yearly endowment of 1 cent on each \$100 of taxable property is given, but nothing has been done towards providing the "missing link"—the High School—which should join the one to the other. The time appears to be ripe for this to be done. The population of most of the counties has materially increased in the last ten years. Many parents desire for their children a more advanced culture than is afforded by the Grammar Schools, and are unable to send them away to school. This culture would fit them for a higher walk in life and enable them to exert a leading and more refined influence in society and the State at large.

To those who desire to go further and take a University course, it offers the necessary stepping stone, which, with both the lowest and the highest education made free to them, it seems to me they have a right to expect.

From all these considerations it became apparent to me two years ago that the establishment of County High Schools would be a great benefit to our youth and would put California into the front rank of States in respect to its school system.

The attention of the Legislature of 1889 was accordingly drawn to the subject through the last report of this department and by personal representation. I formulated a bill authorizing the residents of any county to vote a tax for the maintenance of a High School, and it was introduced into the Assembly by Hon. E. D. Adams of Yolo, and into the Senate by Hon. Frank McGowan of Humboldt, both of whom were ardent supporters of the bill and conducted it to a final passage; unanimous in the Assembly and receiving but two dissenting votes in the Senate. The bill failed to receive the Governor's approval, no reason being given therefor. (See Exhibit B.)

GRAMMAR SCHOOL COURSE SCHOOLS.

As a sort of hybrid High School the Grammar School Course School was introduced into our system of schools a few years ago, but the law regarding it is not in good working order and should be altogether remodeled. Districts having ungraded schools should never adopt the course, as too much work falls upon the teacher. Neither is there time enough allowed to properly complete the course, and the school is at a great disadvantage compared with those which are supplied from regularly graded classes.

All cities and all districts not voting such course are unjustly compelled to pay a share of the tax levied for its support, while, at the same time, it is absolutely impracticable for all districts to adopt the course.

The whole law regarding the Grammar School Course Schools is a cumbersome interpolation, which was not sufficiently considered before its introduction, in regard to its bearings on the rest of the law.

It were better that it be stricken from the statute books, and that the law providing for the establishment of County High Schools by a vote of the people take its place.

FREE TEXT-BOOKS.

Many arguments can be and are advanced, both for and against the use of free text-books, but the weight of the evidence seems to be in their favor.

The Legislature of Maine, at its last session, passed a law requiring all towns to provide free text-books for the public schools after August 1, 1890. This measure had been earnestly recommended by the State Superintendent in his report the year previous. He says:

The free text-book plan—that in which the books are owned by the town and loaned to pupils for use in schools—is the only plan which meets all desired conditions. It gives complete uniformity in the town, which is necessary for the well-being of the schools—a prompt and full supply of just the needed books, and is cheaper than any other method. There is no objection to the plan which does not equally lie against the furnishing of free school-rooms and free instruction. Indeed, its adoption is needed to make our schools wholly free. So made free, they would be rendered far more efficient for good in the State, by increasing the attendance, and by securing the longer continued attendance of just that class of pupils who most need the training of the schools.

For eleven years there was a permissive text-book law in Massachusetts, but six years ago the law was made compulsory, and its practice has been attended with most satisfactory results, so the Secretary of the State Board of Education reports.

New York City and Philadelphia have furnished text-books to their school children for fifty years. Colonel George T. Balch, Auditor of the New York City Board of Education, writes:

I believe that it is the only proper course to pursue, and the only one consistent with the broad principles upon which the whole public school system of education is based. If it is legal and advisable for the State to furnish teachers and school houses, it follows as a matter of course that it should furnish the necessary supplies to make use of the school house and the services of the teacher. The plan insures that uniformity which is an essential feature of success in any large system, and at much lower cost than can be obtained in any other way. The experience of this Board is overwhelmingly in its favor, and I think no State system of education is complete without it.

The cost of the supplies in 1888 per grammar scholar was \$1 66, and per primary scholar 43 $\frac{1}{10}$ cents.

The Michigan Legislature passed a free text-book law about three years ago, and the State Superintendent of Iowa says in his last report:

I am strongly of the opinion that the surest and quickest relief (from the evils connected with the use of text-books) will be found in giving the people of each district the power to furnish the text-books, as they furnish the desks and other equipments of the school, without cost to the individual pupil. A long step in advance was taken when, in 1858, the rate bill system was abolished and the door of the school house was thrown wide open to the child of the poorest parent in the State. It would be another step forward if the General Assembly would make our schools absolutely and entirely free schools. It would undoubtedly bring children into them whom a compulsory law would fail to reach.

In our own State, the Legislature of 1889 passed a law giving districts the permissive power of supplying free use of books to their schools. It passed by a large majority in the Assembly and a unanimous approval in the Senate, but it failed to receive the Governor's sanction. With all due deference to those who oppose this plan, I still hope to see it adopted in California, believing that it will increase the efficiency of our schools and widely extend their benefits. (See Exhibit C.)

CIVIL GOVERNMENT.

Although it is often charged that the curriculum of our schools is over crowded, it seems to me that it was a wise movement in the Legislature

of 1889 to add the study of civil government to the list already required by law, and to authorize the State Board of Education to have prepared a book on the subject as one of the State series. The compilation of this book has been assigned and the manuscript is nearly completed.

Some one has defined civics as "the science of citizenship."

In our country, where so large a foreign element forms a factor of our body politic, it is especially imperative that the underlying principles of our Government should be implanted in the minds of our youth, together with the manner and plan of their execution, the privileges they give, and the duties they require.

Coming to us as a refuge from the crushing tyrannies, the degrading poverty, and the narrow opportunities of the Old World, it has been our experience that the superabundance of liberty found here was considered by many as a superabundance of license. Therein has arisen our troublous "anarchism" and the loosening of our American control. America has opened wide her gates to these people and offered them homes and privileges such as they never dreamed of in their native lands. But America must see to it that they become true American citizens, claiming no more than the equal rights accorded by our grand Constitution to all.

Impressed with this necessity on the part of our Government, some of the clearest thinkers of the world have organized an "Institute of Civics" for the study of the principles of civil structure. Though the movement in this direction is quite recent, the study has already found a place in many college and university courses. So few of our pupils ever reach these higher institutions of learning, that it is appropriate and necessary that our common schools should find a place for a branch that is so important to the welfare of the State. It should find an oral beginning in the lowest grades. The primary teacher should begin with the true principles of right and wrong, and by text, story, or example the study should be continued through all grades to the college. The public school is the nation in miniature, and in the public school the republic of the future must secure and assimilate the nationalities of the Old World, and thereby retain and control its American spirit and power. With the love of their country firmly implanted in their hearts, with some knowledge of the aims of our Government and what is expected of them as citizens, it is fair to suppose that the legislative duties that will devolve upon our children in their mature years will be performed with intelligence and honor, thus securing the permanency of the nation.

A few suggestions made by an eastern County Superintendent are worthy of reproduction here:

1. Let the teacher of the primary grades avail herself of all opportunities to quicken affections, to encourage patriotism, to develop a love of truth and honor.

2. Let the teacher of the intermediate grades encourage her pupils to memorize and study the sentiments of patriots and good governors, to cherish the memory of those who won the independence of our country, and to study the primary history of the people.

3. Let all teachers in ungraded schools have at least one general exercise each week that shall set forth the beauties of our Government, and the lacks in the observance of its requirements. Speak of the privileges of the citizen; the honor attaching to the citizen of the United States.

4. But, above all, let the example of the teacher be above reproach. If entitled to the privileges of citizenship, he should use them conscientiously and free from prejudice, but he should ever be free to assert them and to maintain his opinions.

MORALS AND MANNERS.

These words stand upon our statute book, and are found in our courses of study, but *do they enter the school-room?* Are they living and breathing entities, striving for entrance into the minds and hearts of the children whose future lives we are fashioning, or are they a dead alliteration stopping at the lips?

Has the injunction set forth some time ago, "With all thy getting, get understanding," come close enough to our consciousness to force us to a constant inculcation of the understanding of truth, of the understanding of courtesy, of the understanding of honor?

That something, somewhere, is radically wrong in the morals and manners of the rising generation, is at times painfully apparent, but it is not right that teachers should be held wholly responsible for this.

Yet where the home training fails the teacher must supply; where the home training is deficient, the teacher must supplement.

"The quiet suggestion, the fitly chosen word, the interested inquiry, the unfeigned sympathy," above all the bright *example* of a loving, judicious teacher, may be an electric current extending through the child to the home, galvanizing the comatose virtues of deportment and morality into a higher and brighter life. Is not this result worth striving for, worth much thoughtful attention, *worth our while?*

Think how our teaching will ripple along the tide of present life into the life of the future, reforming, elevating, blessing wherever it goes, and it will give us new strength to take up and carry on, with heart and hope and constant zeal, the too much neglected teaching of "morals and manners."

SCIENTIFIC TEMPERANCE INSTRUCTION.

The provision in our law requiring scientific temperance instruction to be given in *all* grades, was adopted by the Legislature of 1887.

Up to the present time the teaching has been desultory, and the results inappreciable. Some teachers are earnest and enthusiastic on the subject, many take hold of it in a cold, perfunctory way, and many, I fear, neglect it altogether. Some teachers, when the law was passed, found themselves unprepared to do anything in that line, and not having the fear of an examination before them, failed to make any adequate preparation. Some of the County Boards very properly required an examination of their teachers in this subject and entomology before issuing renewals of certificates. The course of study suggested by the State Board of Education supplies the data for some years only. It was my purpose, had time permitted, to send a circular to every teacher to obtain some statistics regarding the carrying out of this part of the law—inquiring:

1. If attention has been paid to it?
2. What method is employed?
3. Are text-books used by pupils?
4. Have pupils been subjected to examination?
5. Is the subject included in county course of study?

I would suggest that County Superintendents give this subject a more prominent place at their Institutes and in their teachers' examinations, and that pupils be examined thoroughly in the work prescribed for each grade.

Also, that by legislative enactment scientific temperance be added to the branches mentioned in Section 1772 of the Political Code, and that the words "intemperate habits" be added to the clause (Subdivision V, Section 1771) bearing upon the revocation or suspension of certificates.

If this were done, the almost universal desire which I have observed among our Superintendents and teachers to uphold the law would produce beneficial results in this direction.

INDUSTRIAL TRAINING.

It is a fact that California, with only forty years of Statehood, has made most wonderful progress. In educational matters, with the experience of other States as a guide, she has been enabled to establish an excellent system of public school education, and to take a front rank as regards the quality of teachers employed, the methods of instruction pursued, and the generous financial support furnished by the State. And yet our system is fast-bound by the shackles of custom, being based on the principle promulgated in the far-away past that education was a training of the intellect alone.

We have not yet taken any decided steps toward freeing ourselves from these fetters, and stepping on to the higher and more advanced plane that contemplates manual training as the necessary correlative of the intellectual.

It has become an acknowledged belief among a large majority of teachers and school officers that our schools, as they are at present conducted, are educating our children "*away* from the ideas of practical, self-helpful, industrial life, rather than towards it."

The conduct of all the industries of the day has been greatly modified by the advanced scientific knowledge brought to bear upon them, and in order to keep pace with the times, we must correspondingly modify our methods of education, that our boys and girls may not be turned out altogether helpless and unprepared to cope with the facts and forces of, to them, an unknown world.

These rapid discoveries in science have produced such a mass of new material for education that the school system must, per force, be receptive and adaptive, or progress will be blocked, and the results attained fall short of what the times demand.

Already have the European nations recognized the imperative need of engrafting manual training upon the old forms of education. Finland took the lead, and in 1866, by legislative enactment, manual training was made obligatory in all its Primary and Normal Schools. Particularly in Sweden, France, and Switzerland has this subject received the most careful consideration, and the system has been fully, generally, and satisfactorily established in the public schools. Many of the leading minds in every civilized country have aided in the movement, giving it their unqualified support.

Our National Government moved in the same direction, when, in 1862, it passed the Land Grant Act, providing for the establishment of agricultural colleges, where, also, the mechanic arts should be taught. The influence of these colleges, their direct connection, in many instances with the public schools, and the able body of scientific teachers employed by them, has had the effect of making more popular the idea of manual training in connection with our public schools. It is true that a decided

opposition to this movement has been shown by a number of teachers, but this arises, it would seem, from a misapprehension of the subject. Their chief objection is made by saying that it is not the province of the school to teach trades.

But it is not claimed by the advocates of manual training that its purpose is to teach trades. Our courses of study heretofore have contemplated only intellectual and moral development. With the addition of manual dexterity the "whole boy would be put to school," the brain, the eye, and the hand would be taught to work together, and *all* the power that is in the child would be brought out, ready for practical application to the purposes of life. So far as this idea (that manual training is to teach trades) has gained ground, it should be carefully uprooted.

M. Lyles Ferry, in an admirable address delivered on the occasion of the laying of the corner-stone of the Vierzon School of Primary and Professional Instruction, states the matter clearly in the following words:

The professional instruction which shall be given here, will have for its distinctive character, not to constitute a separate instruction for any single industry. It will be professional without specialization; it will teach the general principles upon which all industries rest.

And what will be the consequence of this general professional education, which will not give a trade, but which will render the pupil capable of learning much more quickly and much better that which he shall choose? The consequence will be double. The duration of apprenticeship will be notably reduced, and during these years of study the child will have time to choose freely, and with knowledge of his reasons, the career which befits him.

Many cities in the United States have already adopted in some way this innovation, and the results have been so gratifying that public opinion is swinging surely around in its favor.

In the report of New Haven (Conn.) Board of Education for 1887-88 is found this testimony:

Although in a crude state of development, this workshop method of instruction is likely to grow in favor and excellence until its rightful place in the school system is determined. In the meantime, it stands as a protest against the teaching of mere words, and makes its eloquent appeal for recognition on the ground that it supplies an element in education that has been almost entirely lacking.

The Superintendent of Massachusetts Schools says, in his report of 1885:

A very little observation among the boys is enough to show that a clear mind generally accompanies the skillful hand—that manual skill has its mental as well as its physical side, and that manual training is really a means of mental training. The interest in their work shown by the boys is very lively, such as I have seldom seen surpassed in any other kind of school work. The experiment has now gone far enough to prove that this kind of training can be joined with the ordinary Grammar School work without practical inconvenience, and with good effect on the boys. The consciousness of new power awakened and trained for practical ends is very gratifying to them.

The city of Springfield, Massachusetts, having made a most successful experiment with one school, the committee reports:

We cherish the hope that in the near future the liberal citizens of Springfield will provide for the use of the city, under proper regulations, suitable buildings, in which at least one hundred pupils can receive simultaneous mental and manual training. * * *

The object in establishing such a school is not to train apprentices and teach trades, but to drill pupils in the fundamental mechanical principles that are the basis of all trades, and to foster a higher appreciation of the value and dignity of intelligent labor and the worth and respectability of laboring men.

Its graduates will become intelligent workingmen, producers of wealth, developers of

the inexhaustible resources of our country, and the promoters and defenders of that peculiarly American civilization which is destined, in God's providence, to lead the world in every art and industry.

The Minneapolis School Superintendent says:

Though we have worked but a little over one year and commenced in a very small way, the work already done has been highly spoken of by mechanics and educators, and the pupils, generally, take great interest in their work without losing interest in their other studies.

In the report of the Philadelphia Manual Training School, we read:

A high moral tone pervades the school, and throughout all its departments a spirit of hearty coöperation, on the part of the pupils, makes the labor of instruction pleasant and effective. The ability to execute with the hand what the mind plans, fosters a spirit of self-reliance and manliness, and goes far toward the development of character.

The school is no longer an experiment, but an assured success.

I am fully persuaded that district manual training schools, to the number of five or six, will be necessary within a few years to meet the requirements of our people.

The same positive kind of testimony in favor of this branch of education comes from Cleveland, Toledo, St. Paul, Omaha, St. Louis, Chicago, Atlanta, Florida, New York, Newark, Baltimore, in fact, wherever it has been tried.

THE COGSWELL POLYTECHNIC SCHOOL.

In California, very little, as yet, has been done in this line; no settled and systematic attempts have been made. One manual training school has been established in San Francisco in connection with the City School Department—the Cogswell Polytechnic High School. It was established first by private enterprise, and afterward passed under the control of the Board of Education, who classed it with their other High Schools. The work done here has been a great success, and the popularity of the work department is such as demands not only its continuance, but its extension.

This establishment of manual training in public schools is to be the great progressive movement of the age. No great reforms are accomplished except by slow steps and against opposition from certain sources; but success is sure where the great interests of humanity demand the change, as does this educational reform of which I have been speaking. The ultimate future of the movement is not to be doubted, and if California would not fall behind in the onward march of the States, her educational authorities must take steps to incorporate this rational and natural process of education in our public school course. County Superintendents and Boards of Education are specially urged to give their earnest attention to this very important educational measure.

COOKE'S ENTOMOLOGY.

One act of useless and extravagant legislation was committed during the session of 1889 in appropriating \$15,000 for the purchase of the plates of the book known as Cooke's Entomology, without making any provision for the use of those plates.

The bill was signed by the Governor, the plates became the property of the State, and have been in storage in this department for nearly two years.

The book is not adapted for use by the pupils in the school-room and never was intended by its author for that purpose. It would, therefore, be entirely unnecessary for the State to continue its publication.

REPORT OF THE HORTICULTURAL COMMISSION.

The annual report of the Horticultural Commission is a work of such practical value that it should be placed by legislation on every teacher's desk in the State, and be freely used in lessons on entomology given in the class.

CALIFORNIA EDUCATIONAL ASSOCIATION.

In the last report of this department a suggestion was made, which I repeat here, so strongly does the plan commend itself to my mind, that the balance of \$4,200, from the funds raised for the meeting of the National Educational Association, be made the nucleus of a fund for erecting an "Educational Building" and establishing a permanent "Educational Exhibit," for the purpose of showing the progress in educational work, and supplying a place where teachers, school officers, and all other persons interested, can have a convenient opportunity for examining the latest school appliances and school text-books. A place where shall be found a library containing, not only new, but old, text-books, all the current educational periodicals, all works treating upon the theory and practice of teaching, and all modern school apparatus and appliances, such as kindergarten blocks, charts, maps, globes, and school furniture. Here, too, should be found works on school architecture, and photographs of ancient and modern school houses, articles made by manual training schools, the deaf, dumb, and blind, and the public schools of the State, which will exemplify the proficiency of the pupil and the progress in methods of instruction. It is believed that the publishers of works on education and pedagogics, and the manufacturers of school appliances, will supply the library with the most, if not all, of their works free of cost. It is also believed that the establishment of such an institution will give inspiration and impulse to educational work, which will excite interest among the people and stimulate teachers and officers to greater effort.

At the final meeting, however, of the local Executive Committee it was decided to divide this money among the free kindergarten schools of Oakland and San Francisco. But, later on, in pursuance still of this object of establishing an Educational Exposition Building, the California Educational Association was incorporated with the following officers: Ira G. Hoitt, President; James Denman, Treasurer; James T. Hamilton, Secretary. The matter rests there. Whether anything further shall come of it depends upon whether any one shall be sufficiently far seeing and sufficiently interested to advocate personally its benefits, and bring it to a successful fulfillment.

THE WORLD'S FAIR AT PARIS.

It is a fact, of which the people of California may well feel proud, that the Department of Public Instruction of this State was awarded a gold medal at the World's Fair in Paris. The award was made upon the exhibit, requested by the United States Commissioner, which consisted

of a copy of our school laws, a copy of each book of the series of State text-books published, a copy of our School Register and Library Record Book; and of each blank report, blank diploma, and a complete set of other blanks used in conducting the schools of the State, together with a copy of the Superintendent's Biennial Report.

THE WORLD'S FAIR AT CHICAGO.

Much interest has already been manifested by the people of California in the forthcoming World's Fair at Chicago. It will be the opportunity for the State to make a showing of its educational development, as well as of its material resources. Certainly no State in the Union has better facilities for a grand educational exhibit. With our free kindergartens, our Primary and Grammar Schools, our High and Normal Schools, our Cogswell Polytechnic School, our efficient corps of County and City Superintendents, and over five thousand teachers, equal, in ability, to any equal number to be found anywhere, I am confident that, with proper organization and united effort, California will stand at least an even chance for the grand prize.

The great variety and beauty of our California woods, from which to prepare handiwork; the almost endless variety of our minerals, from which to collect cabinets; our abundant, beautiful, and rich flora, from which to arrange an herbarium, offer facilities and afford an opportunity to the schools of California possessed by no other State in the Union. The very efforts made by the teachers and pupils in the preparation for such an exhibit will give lessons that will be of immeasurable value to the educational development of the State. Let the Superintendents, teachers, and pupils of California do their duty, and the coming Legislature assist the movement by a liberal appropriation, and we are sure the State will have occasion to be proud of her sons and daughters.

STATE TEXT-BOOKS.

It is now six years since our Constitution was amended, making it the duty of the State Board of Education to compile a series of text-books for use in the schools of the State.

The experiment was unique, and has been attempted by no other State. The books were to continue in use not less than four years. This time will shortly have expired as regards the Readers, which were ready for distribution in December, 1886, and the continuance of the scheme will be determined by the future actions of the Legislature, and of the various County Boards, in reference to a change.

If school officers and the Legislature shall decide to discontinue the use of the State books, the experiment will have proved a costly one.

The members of the State Board of Education, who have had in charge the compilation of this series, have done their very best, under the provisions of the law, to make successful books.

It is not to be denied that, in our isolation from the great literary and trade centers, this has sometimes been a task shadowed with many obstacles.

The changes in the Board that have occurred from time to time, the widely scattered residences, and the heavy duties already devolved upon each member of the Board, and upon those employed to compile the

books, have all been obstacles in the way of a speedier completion of the work.

As was to be expected, the opposition from various sources has been strong and unceasing. But whether the system is continued or changed, it does not alter the fact that the people should be protected in some legislative way from the extortion of book rings. In just what form this protection can best be given is difficult to determine. To my mind, the free text-book system offers a full solution of the problem.

Massachusetts has adopted the free text-book system and buys books direct from publishers at special wholesale rates. The same is true of New York City, Philadelphia, Newark, Jersey City, Paterson, New Brunswick, and a number of towns in Maine, Rhode Island, Vermont, Pennsylvania, and of over five hundred districts in Michigan.

Minnesota contracts with a publisher to furnish books of certain size and quality at rates not to exceed the prices fixed by law.

In Virginia, the State Board of Education eight years ago had a contract with publishers which limited the prices, and they remain about the same at the present time.

In West Virginia, the State Superintendent is empowered to make the contract with publishers, and obtains for dealers about 16 $\frac{2}{3}$ per cent discount from wholesale price list.

Direct contracts with publishers are also made in Maryland, North Carolina, Delaware, parts of Kansas, and in the city of Topeka.

In all other States, books are bought in open market.

In Massachusetts, the school books cost in one year 48 $\frac{1}{4}$ cents per pupil.

In New York, the free text-books are purchased at a discount of 33 $\frac{1}{3}$ per cent from retail prices, and the same discount is given generally to all places supplying free books.

In Virginia, the retail price is 16 $\frac{2}{3}$ per cent discount from the usual retail prices. The Superintendent of West Virginia says:

The text-book system that has been in operation during the past five years is very satisfactory. Our people buy their books cheaper than any other State in the Union, as the law provides that the *retail* price at which books are sold in West Virginia shall be the *lowest wholesale* list price charged to any other State, firm, or person.

Minnesota appropriated \$50,000 for a Revolving Fund with which to purchase the books. California has appropriated \$315,000 for the manufacturing plant and for the first fifty thousand copies of each book, and also \$35,000 for purposes of compilation.

Since 1885, \$255,054 42 have been expended for labor alone, and \$25,644 20 for purposes of compilation, and \$234,886 48 have been received from sales for the same length of time, ending June 30, 1890.

A certain proportion of the receipts is expected to pay for the plant in twelve years, but the total receipts form a Revolving Fund, used by the State Printer for manufacture of all editions after the first fifty thousand.

The advantages of State publication are that it has relieved County Boards of Education from the solicitation of book agents; that it has reduced the prices of the books from former rates, and that the money spent therefor has been retained in our own State.

The disadvantages claimed, are: first, that it costs the State more to manufacture the books than it would cost a private publishing house. This is true, because the State pays its employés a higher rate of wages and requires only eight hours of daily service; second, the lack of all competition in the authorship; third, the intrusting of the work of

supervision to a Board, whose members are already burdened with duties, and which is subject to frequent changes. For instance, five changes have taken place in the membership of the State Board of Education in the last three and a half years; only one member of the Board inaugurating the work now remains.

The work was commenced in October, 1885, as follows:

To Superintendent W. T. Welcker and Editor Raymond was assigned the preparation of the Readers and a Speller, the reading matter presented by Mr. H. C. Kinne being adopted as a basis for the Readers.

To Charles H. Allen, the preparation of an English Grammar.

To Ira More, the preparation of an Advanced Arithmetic.

The Readers and Spellers were issued in December, 1886; the Advanced Arithmetic in June, 1887, and the Grammar in June, 1888.

In January, 1887, two changes of membership took place in the Board, and in February new work was assigned, as follows:

To Superintendent Ira G. Hoitt, the supervision of the preparation of a History of the United States.

To Charles H. Allen, the supervision of the preparation of an Elementary Grammar.

To Ira More, the supervision of the preparation of an Elementary Arithmetic and a Physiology.

The History was issued in June, 1888; the Elementary Grammar in June, 1889; the Elementary Arithmetic in December, 1887.

In 1889, Professor More asked to be relieved from further service in the preparation of the Physiology, on account of overwork.

The supervision of this book was accordingly transferred to the Superintendent and the Editor. It will probably be issued early in 1891.

In June, 1888, the Board directed the preparation of an Elementary Geography and placed the work in the hands of Superintendent Hoitt and Editor Raymond. It was issued in June, 1890.

In April, 1889, E. T. Pierce, Principal of the new Normal School at Chico, took his seat in the Board by virtue of his office, increasing the membership to five; and, in July of the same year, upon the resignation of C. H. Allen as Principal of the Normal School at San José, C. W. Childs was appointed his successor and became a member of the Board.

In September, 1889, Mr. Childs undertook to supervise the preparation of a work on Civil Government, and in December, 1889, the Board assigned to Superintendent Hoitt and Mr. Childs the supervision of the preparation of an Advanced Geography.

The work on Civil Government will probably be issued in 1891, and the large Geography in 1892.

HOW PRICES ARE FIXED.

The following rules, which were at first adopted by the Board for determining the cost of a book at Sacramento, have been continued in use:

1. Divide the cost of preparing the plates of a given book, including composition, engraving, and electrotyping, by estimated supply of that book for twelve years.
2. Divide the share of the cost of the plant chargeable to a given book by the estimated supply for twelve years.
3. Divide three fifths of the cost of compilation by the estimated supply for four years.
4. Divide the cost of the presswork, paper, and binding of a given edition by the number of that edition printed.

5. Take the sum of the preceding quotients and add 1 cent per copy for revision of text, and 1 cent per copy for revision of plates.

To illustrate the application of these rules, the items in the cost of the Third Reader, a book of five hundred and twelve pages, are here given:

Plates	\$3,502 44, as reported by Superintendent of Printing.	
20 per cent of plant.....	7,300 00, as reported by Superintendent of Printing.	
Total	\$10,802 44÷300,000 (estimated supply for twelve years) .....	.083
Compilation	\$1,531 00.	
Three fifths.....	908 00÷100,000 (estimated supply for four years).....	.01
Edition, cost	9,614 60÷ 20,000 (number of edition) .....	.48
Add for revision of text.....		.01
Add for revision of plates.....		.01
Cost of book.....		.543

Assuming postage to be the cost of distribution, the retail price becomes 66 cents.

It will be seen that the course pursued insures a full return to the Treasury of the State of all money appropriated therefrom and expended, and provides for such revision from time to time as may be necessary.

COMPARISON OF PRESENT AND FORMER PRICES.

The following statement of present and former prices is given without comment. The prices are in all cases retail prices:

I.

State Readers, complete in three books (948 pages).....	\$1 25
State Speller and Word Analysis (192 pages).....	30
State Arithmetics, two books (437 pages).....	75
State Grammars, two books (450 pages).....	80
History United States (432 pages).....	80
Elementary Geography (132 pages quarto).....	60
	<hr/> \$4 50

II.

Corresponding books formerly used:

McGuffey's Readers, five-book series, cheapest in former use (1,088 pages).....	\$2 50
Reed's Spellers (188 pages).....	30
Fish's Arithmetic, two books, cheapest in former use (498 pages).....	1 05
Reed & Kellogg's Grammars, two books, cheapest in former use.....	1 25
Histories of United States, uniform in price (320 to 400 pages).....	1 25
Elementary Geographies, uniform in price (82 to 120 pages).....	75
	<hr/> \$7 10

PROVISION FOR COMPLETING THE SERIES, AND FOR REVISION.

In fixing the prices of the books issued, as has been seen, the Board has provided for a self-sustaining series, and for relieving the General Fund from further drafts for compilation and revision. Of the \$35,000 appropriated to the use of the Board, there remained on hand July 1, 1890, \$9,335 80. In addition to this sum, all that is needed to enable the Board to complete successfully the work of further compilation and revision is the use, from the proceeds of sales, of the 1 cent per copy which has been added to the price of each book for that purpose.

PROCESS OF DISTRIBUTION.

The Act of 1887, providing for the distribution of books through private dealers, has proved effective, and in most respects satisfactory.

The only friction arising has been in consequence of the prohibition to sell books to be sold again. This prohibition was imposed to prevent books getting into the hands of dealers not bound to sell at the price fixed by the Board. In my judgment, the prohibition should be removed, if, at the same time, the selling of books by any one above the retail price fixed by the Board is made a misdemeanor, and punishable as such upon conviction.

PUBLIC SATISFACTION.

For four years the scheme has had a fair and impartial trial. Every aid to its successful issue, which this office could suggest or render, has been given. Ten books in all have been published during this time, and three more yet remain to be issued, two of which are nearly completed. So far as my observation goes, the favor with which the series has been received has been very much the same as that accorded to the books of private publishers. Many of the teachers throughout the State look upon the series with very general favor, while others have been less pronounced in their commendation, and some have expressed severe and adverse criticisms. In the expressions of preference and criticism, there is not much uniformity, some teachers preferring one book of the series and some another. Nearly all agree that the readers are poorly graded, that they should be revised, and at least one if not two more books should be added to the series.

My conversations with teachers and Superintendents in various parts of the State lead me to the conclusion that with a few exceptions the books of the State series are giving as fair general satisfaction as the books previously in use. The mechanical work, at first bitterly complained of, is now generally conceded to be good. The character of this work may easily make a difference of 25 to 50 per cent in the working life of such books.

The State publication of text-books in California has undoubtedly been one factor in causing the publishers of school books generally to reduce their prices, and there is not now so great a difference between the prices of our State series and those of private publishers; it would even be possible for the State to purchase school books now, at wholesale, for less prices than it costs to manufacture them at the State Office, as may be seen by the following lists of *present* prices at which books are now sold:

Swinton's First Reader.....	\$0 18
Swinton's Second Reader.....	35
Swinton's Third Reader.....	50
Swinton's Fourth Reader.....	65
Swinton's Word Book.....	18
Milne's First Lesson Arithmetic.....	22
Milne's Practical Arithmetic.....	50
Maxwell's Primary Lessons in Language.....	30
Maxwell's Introductory English Grammar.....	40
Swinton's United States History.....	90
Harper's Introductory Geography.....	48
Total	\$4 66

McGuffey's Revised First Reader.....	\$0 17
McGuffey's Revised Second Reader.....	30
McGuffey's Revised Third Reader.....	42
McGuffey's Revised Fourth Reader.....	50
McGuffey's Revised Speller.....	17
Fish's Arithmetic, No. 1.....	30
Fish's Arithmetic, No. 2.....	60
Kerl's Language Lessons.....	32
Wells' English Grammar.....	36
Ridpath's United States History.....	80
Monteith's Elementary Geography.....	60
Total.....	\$4 54

These are retail prices, and were the State to purchase in large quantities, a discount from these figures of 33 per cent could probably be obtained.

As such an arrangement would entail an amendment to the Constitution, it is not likely to be done very soon.

TEXT-BOOKS SOLD.

The following table shows the number of books sold and the amount of money received, to July 1, 1890:

NAME OF BOOK.	Sold.	Amount Received.
First Reader.....	156,438	\$23,465 70
Second Reader.....	116,233	37,183 65
Third Reader.....	76,331	37,220 48
Speller.....	110,119	26,021 70
Primary Number Lessons.....	55,645	11,170 88
Advanced Arithmetic.....	106,151	40,536 90
English Grammar.....	59,621	25,040 82
United States History.....	37,658	26,360 60
Lessons in Language.....	30,569	7,642 25
Elementary Geography.....	487	243 50
Totals.....	749,252	\$234,886 48

Number and value of finished books on hand July 1, 1890:

NAME OF BOOK.	Number.	Value.
First Reader.....	26,678	\$4,001 70
Second Reader.....	32,178	10,618 74
Third Reader.....	17,370	9,379 80
Speller.....	19,661	4,915 25
Primary Number Lessons.....	24,247	4,849 40
Advanced Arithmetic.....	38,508	16,170 84
English Grammar.....	40,319	16,933 98
United States History.....	37,264	26,084 80
Lessons in Language.....	19,210	4,802 50
Elementary Geography.....		
Totals.....		\$97,757 01

Amount in Revolving Fund, \$70,600 79.

SUMMARY OF RECOMMENDATIONS.

1. That applicants for State diplomas be examined by the State Board of Education.

2. That regular Institute Conductors be appointed by the State Board of Education and paid by the State, and that County Superintendents be required to confer with Superintendent of Public Instruction concerning the time of holding the various County Institutes.

3. That architects' plans and specifications for school houses costing for construction from \$500 to \$20,000 be prepared and copyrighted for the use of the School Districts of the State.

4. That the annual report of the State Board of Horticulture be required, by law, to be placed in every public school library in the State.

5. That the granting of teachers' certificates be based upon a uniform standard of qualifications and controlled by a central authority, and when certificates are so issued they shall be valid in any part of the State.

6. That at least three years of the experience required for a State educational or life diploma must be obtained in California.

7. The passage of a law authorizing counties, by a vote of the people, to establish and maintain County High Schools.

8. That the law on compulsory education be revised so as to make it more effective.

9. That the expenditure of the District Library Fund be placed in charge of the County Boards of Education.

10. That scientific temperance instruction be added to the branches in which teachers are examined.

11. That as a rule more time be given to discussions and class-drill exercises in Teachers' Institutes.

12. The adoption by the Legislature of a free text-book system.

13. The establishment of "Arbor Day."

14. The establishment of manual and industrial training (including the kindergarten) to some extent in all public schools.

15. The reduction of the amount of work generally given in the courses of study throughout the State, or the addition of a year's time in which the pupils are required to complete the course. This recommendation is regarded as absolutely essential to the well being of children in our public schools.

16. That the law providing for the distribution of State text-books be amended, making it a misdemeanor for any person in the State to sell any one of the State text-books for a higher retail price than that fixed by the State Board of Education, and allowing all persons who wish to handle them under such restriction.

PERSONAL.

In conclusion, I wish to record here my sincere and grateful thanks to the County Superintendents who have given me, throughout my incumbency, their hearty coöperation and assistance; to the thousands of teachers who have expressed their sympathy with my aims and appreciation of my efforts; to the patrons and friends of the public schools who have given me generous encouragement, and to the California press, which has been more than ordinarily friendly.

My thanks are also due to the officers and employés in the departments of the State Controller, Treasurer, Attorney-General, Secretary of State, State Librarian, and Adjutant-General, and to the Editor-in-Chief of the text-books, and the engravers for their uniform courtesy in all personal and official relations.

For four years it has been my pleasure to contribute whatever of thought and energy I could command, to the care and improvement of our educational system. In the discharge of my duties, I have attended over one hundred Teachers' Institutes, and conferred with thousands of teachers and parents.

I retire from office with an unflinching interest in the progress of our schools and an unbounded hope for their future.

I here desire to publicly commend the willing and efficient services of the attachés of the office, Mr. Joseph Pentecost and Mr. W. F. Purnell; and, in this connection, I may be pardoned if I refer particularly to the work of my Deputy. To her unflagging interest, untiring zeal, and great personal sacrifices, are very greatly due the promptness and faithfulness with which the duties of the office have been performed.

The appropriations for the office, of \$1,500 for traveling expenses, \$1,000 for expressage, telegraphing, and postage, and \$150 for contingent expenses, have been ample.

There is no deficiency, and a balance in the traveling expense fund reverts to the Treasury.

Respectfully submitted.

IRA G. HOITT,
Superintendent of Public Instruction.

IN MEMORIAM.

JOHN LINDLEY WILSON.

During the past year death has taken from among us one of our most efficient and best loved County Superintendents, John Lindley Wilson, of Colusa County. Cut off in the flower of his manhood from a most promising educational career, his loss is deeply felt by all who had ever been brought into association with him and by the schools over which he presided as Superintendent. He was born in Milan, Sullivan County, Mo., May 25, 1853, and died at his home in Colusa, March 16, 1890, aged thirty-six years.

County Superintendent Charles H. Murphy, who knew him from boyhood, pays him this tribute:

John L. Wilson was truly a self-made man, and a great man in his sphere. The spirit of enthusiasm and the habits of industry and perseverance formed in youth, were the soul of his success as an educator. A poor boy, with many difficulties to encounter and many inconveniences to endure, he felt that whatever he achieved in life must be the result of his own exertions. From the humblest walk in life, by dint of persevering industry and energy, he rose—worthily, grandly, and deservedly—to an eminent position of usefulness and influence in society.

His early education was received in the public schools of his native county, where he first engaged in teaching. At the age of twenty he entered the State Normal School of Kirksville, Mo., where, after three years, he graduated with honors from that institution in which he received the training that laid the foundation of his successful career in after life. In 1877, he came to Colusa County, where, for five years, he was successfully engaged in teaching. In 1881, he was, by a grateful and appreciative people, elevated to the highest position within the educational realm of a great county; and four years later he was reflected to succeed himself—laboring assiduously till his death. The labors of such men shape the history and mold the educational sentiment of our State. Who can fitly estimate the value of a life so full of hope and promise, so full of love and devotion for home and family, so full of enthusiasm and inspiration in the school-room, so full of patriotism for his country?

His character was without a stain. He was, indeed, a good man; an eminent educator; a safe counselor; a polished gentleman, courteous in speech and advice, and an unobtrusive Christian.

He was essentially a man of the people; of them and from them; his instincts, his sympathies, and affections were all with them; and his exertions and labors were all directed in their behalf.

Had Mr. Wilson lived, his influence on our school system would have made itself felt in the years to come, and always in the direction of progress and right.

HON. JOHN R. BRIERLY.

It is fitting that in the records of this department shall be found some memorial words regarding Hon. John R. Brierly, who died January 7, 1890, in the fiftieth year of his age.

For more than twenty years Mr. Brierly's clear intelligence and active mind were exercised in behalf of our public school system. He was County Superintendent in Santa Clara for one term, and taught both there and in Los Angeles County, with which latter place he has been especially identified since 1868.

For two terms he served in the Assembly, during both of which he

was a member of the Committee on Education, and during the sessions we had daily evidence of his abiding faith in our school system and his constant watchfulness for opportunities to benefit and improve it.

Hon. John Davis, member of the Assembly from Placer County, says of Mr. Brierly, that "more is due to him than to any other member of the late Legislatures, in securing needed legislation for our school system."

In both his public and private relations, his ready sympathies and clear judgment attracted to himself a large circle of admiring friends who must, for all time, mourn their loss.

In his death California, especially the southern portion of the State, lost one of its most efficient legislators, and the schools of our State a wise and faithful friend.

HOWARD A. MOSES.

Again we are called upon to chronicle one more death in this report, that of Hon. Howard A. Moses, for more than ten years the trusted and faithful Statistical Clerk in this department. His long service in the office rendered him thoroughly familiar with the work in its minutest details, and with the operation of the school law. His interest in everything pertaining to the schools was unflinching, and his relations with County Superintendents during that time were so cordial that his loss was deeply felt by them. Mr. Moses was one of the early comers to California, having reached this coast in 1850. He was born in Ashland, Kentucky, November 17, 1827, and died in Sacramento May 2, 1890.

He was a true, loyal friend, and generous to a fault. As a member of the ninth Assembly of California, and clerk in several of the State departments, he always earned the high reputation which he possessed for integrity and ability.

APPENDIX.

- I. State University.
 - II. State Normal Schools.
 - III. Asylums Receiving State Aid.
 - IV. List of County Superintendents.
 - V. List of City Superintendents and Principals of High Schools.
 - VI. Reports of County Superintendents.
 - VII. Reports of City Superintendents.
 - VIII. Reports of Private Schools.
 - IX. Department Circular.
 - X. List of State Superintendents since 1850.
 - XI. List of County Superintendents since 1880.
 - XII. Statistical Tables.
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STATE UNIVERSITY.

BOARD OF REGENTS.

EX OFFICIO REGENTS.

His Excellency R. W. Waterman, Sacramento.....	Governor, ex officio President of the Board.
His Honor Stephen M. White, Los Angeles.....	Lieutenant-Governor.
Hon. Robert Howe, Sonoma.....	Speaker of the Assembly.
Hon. Ira Gustavus Hoit, A. M., Sacramento.....	State Superintendent of Public Instruction.
Hon. Christopher Green, Sacramento.....	President of the State Agricultural Society.
David Kerr, Esq., 47-49 Beale Street, San Francisco.....	President of the Mechanics' Institute.
—, Berkeley.....	President of the University.

APPOINTED REGENTS.

	Term Expires.
Rev. Horatio Stebbins, D.D., 1609 Larkin Street, San Francisco.....	1894.
Louis Sloss, Jr., San Francisco.....	1894.
Hon. J. West Martin, Union Bank, Oakland.....	1898.
Andrew S. Hallidie, Esq., 329 Market Street, San Francisco.....	1892.
Hon. William T. Wallace, 799 Van Ness Avenue, San Francisco.....	1902.
John Lyman Beard, A.M., Warm Springs, Alameda County.....	1892.
Hon. Timothy Guy Phelps, Custom House, San Francisco.....	1896.
Isaias William Hellman, Esq., Los Angeles.....	1902.
George Thomas Marye, Jr., LL.B., 234 Montgomery Street, San Francisco.....	1898.
Arthur Rodgers, B.S., Ph.B., 309 Montgomery Street, San Francisco.....	1906.
George Jennings Ainsworth, Ph.B., North Temescal.....	1900.
Delphin Michael Delmas, A.M., LL.B., 310 Pine Street, San Francisco.....	1900.
Albert Miller, Esq., 532 California Street, San Francisco.....	1906.
Columbus Bartlett, Esq., 12 Montgomery Street, San Francisco.....	1896.
Charles Frederick Crocker, Esq., cor. Fourth and Townsend Streets, San Francisco.....	1904.
James Franklin Houghton, C.E., 216 Sansome Street, San Francisco.....	1904.

Regular meetings of the Board of Regents are held thirteen times a year, viz.: on the second Tuesday in each month, and on the Tuesday preceding the last Wednesday in June.

The University of California is an integral part of the public educational system of the State. As such it completes the work begun in the public schools. Through aid from the State and the United States, and by private gifts, it furnishes ample facilities for instruction in literature and in science, and in the professions of law, medicine, dentistry, and pharmacy. In the Colleges of Letters, Agriculture, Mining, Mechanics, Civil Engineering, and Chemistry, in the Literary Course, and in the Course in Letters and Political Science, these privileges are offered without charge for tuition, to all persons qualified for admission. In the Professional Colleges in San Francisco, except that of Law, moderate tuition fees are charged. The instruction in all the Colleges is open to all qualified persons, without distinction of sex. The Constitution of the State provides for the perpetuation of the University, with all its departments.

ORGANIZATION.

The departments of instruction comprise the following:

I. IN BERKELEY.

- | | |
|----------------------------------------------|--------------------------------------|
| 1. The College of Letters: | 2. The College of Agriculture. |
| (a) Classical Course, | 3. The College of Mechanics. |
| (b) Literary Course | 4. The College of Mining. |
| (c) Course in Letters and Political Science. | 5. The College of Civil Engineering. |
| | 6. The College of Chemistry. |

II. AT MT. HAMILTON (Santa Clara County).

The Lick Astronomical Department (Lick Observatory).

III. IN SAN FRANCISCO.

- | | |
|-------------------------------------|----------------------------------------|
| 1. The Hastings College of the Law. | 3. The College of Dentistry. |
| 2. The Medical Department. | 4. The California College of Pharmacy. |

The distinctive characteristics of the various colleges are given in detail in the pages of the University Register.

HISTORY.

The University was instituted by a law which received the approval of the Governor March 23, 1868. Instruction was begun in Oakland in the autumn of 1869. The commencement exercises of 1873 were held in Berkeley, July sixteenth, when the University was formally transferred to its permanent home. Instruction began at Berkeley in the autumn of 1873.

The College of California, which had been organized several years before the University, transferred its property and students upon terms which were mutually agreed upon, and closed its work of instruction in 1869. It had been incorporated in 1855, and through its agency a part of the Oakland property of the University, and the Berkeley site now owned and occupied by the latter, were secured.

The site at Berkeley is a domain of about two hundred and fifty acres, situated on the slope of the Contra Costa hills, about five miles from Oakland, facing the Golden Gate. It is traversed by two watercourses, is much diversified in aspect, and is adapted to a great variety of culture. A portion of it is reserved to illustrate the work in agriculture and horticulture, and is now under cultivation. The undergraduate colleges were the only ones actually included in the original organization, although the Organic Act contemplated the establishment of Colleges of Law and Medicine. The Professional Colleges in San Francisco have been added from time to time. The Lick Observatory was formally transferred to the University in June, 1888.

ADMINISTRATION.

The University of California is a State institution, established by the Legislature in accordance with the Constitution, and intrusted to a corporation styled "The Regents of the University of California," which includes the Governor, the Lieutenant-Governor, the Speaker of the Assembly, the State Superintendent of Public Instruction, the President of the State Agricultural Society, the President of the Mechanics' Insti-

tute of San Francisco, and the President of the University, as members ex officio, and sixteen other Regents, appointed by the Governor and approved by the Senate. To this corporation the State has committed the administration of the University, including management of the finances, care of property, appointment of teachers, and determination of the interior organization in all particulars not already fixed by law.

The instruction and government of the students are intrusted to the Faculties of the several Colleges, and to the Academic Senate. The Senate consists of the Faculties and instructors of the University. It holds regular meetings twice a year, and is created for the purpose of conducting the general administration of the University, memorializing the Board of Regents, regulating in the first instance the general and special courses of instruction, and receiving and determining all appeals from acts of discipline enforced by the Faculty of any College; and it exercises such other powers as the Board of Regents may confer upon it.

FUNDS.

The endowments on which the College of Letters and the Colleges of Science have been founded and maintained include the following:

1. The Seminary Fund and Public Building Fund, granted to the State by Congress.
2. The property received from the College of California, including the site at Berkeley.
3. The fund derived from the Congressional land grant of July 2, 1862.
4. The Tide Land Fund, appropriated by the State.
5. Various appropriations by the State Legislature for specified purposes.
6. The State University Fund, which is a perpetual endowment derived from a State tax of 1 cent on each \$100 of assessed valuation.
7. The Endowment Fund of the Lick Astronomical Department.
8. The United States Experiment Station Fund of \$15,000 a year.
9. The gifts of individuals.

The Colleges of Medicine, Dentistry, and Pharmacy are supported by fees from students. The College of Law has a separate endowment.

There is a fine library, a gallery of fine arts, and museums, comprising most valuable and remarkable collections. The general library now contains over forty thousand volumes, and has been arranged with a view to making it especially valuable as a reference library. It receives a large number of periodical publications, literary, scientific, and general, and is furnished with author and subject catalogues and full indexes. It is being constantly augmented by gift and purchase, especially from the income of the Reese Fund of \$50,000.

ADMISSION FROM ACCREDITED SCHOOLS.

Admission from Accredited Schools is regulated by the following order of the Board of Regents:

Upon request of the Principal of any public or private school in California whose course of study embraces, in kind and extent, the subjects required for admission to any College of the University at Berkeley, a committee of the Academic Senate will visit such school, and report upon the quality of the instruction there given. If the report of such committee be favorable, a graduate of the school, upon the personal recommendation of the Principal, accompanied by his certificate that the graduate has satisfactorily completed the studies of the course preparatory to the College, he wishes to enter, may, at the discretion of the Faculty of such College, be admitted without examination.

All applications made in accordance with the provisions of the foregoing paragraph must be in the hands of the Recorder of the Faculties at Berkeley, on or before the twenty-first of March of each year.

Accredited Schools—1889-90.

1. Accredited in all the requirements for admission:

Belmont School.
Oakland High School.
San Francisco Boys' High School.

2. Accredited in part of the requirements for admission:

Alameda High School—accredited for all courses save the Classical Course, excepting in English, subject fourteen.
Stockton High School—accredited for all courses save the Classical Course.
Los Angeles High School—accredited for all courses save the Classical Course.
Petaluma High School—accredited for all courses save the Classical Course, excepting in Physics, subject eleven.
Sacramento High School—accredited for all courses excepting in Physics, subject eleven.
San Diego High School—accredited for all courses save the Classical Course.
San Francisco Girls' High School—accredited for all courses save the Classical and the Literary Course.
San José High School—accredited for all courses save the Classical and the Literary Course.
Santa Cruz High School—accredited for all courses save the Classical Course and the Literary Course, excepting in Physics, subject eleven.
Berkeley Gymnasium—accredited for all courses save the Scientific Courses, excepting in Greek, subject nine.

There is a general ambition among the High Schools of the State to win the honor of being placed on the accredited list. It is an incentive to both pupils and teachers, and in many cases acts as a motive for increased membership.

No action has yet been taken by the Regents towards establishing a Department of Elocution and Vocal Culture, which is much needed.

In May, 1889, the following resolution was passed:

Resolved, That the Academic Senate be authorized to announce the intention of this Board to establish a course of instruction in the science and art of teaching as soon as the same can be properly organized.

Fourteen months have gone by, and no further action has been taken. In view of the fact that many of the graduates expect to become teachers, and of the great importance attached to professional training, the establishment of a Chair of Pedagogy seems a highly important and necessary measure.

The University is again without a permanent President.

STATE NORMAL SCHOOLS.

BOARDS OF TRUSTEES.

STATE NORMAL SCHOOL—SAN JOSÉ.

Trustees.	Address.	Term Expires.
R. W. Waterman, Governor.....	Sacramento.....	January, 1891.
Ira G. Hoitt, Sup't Public Instruction.....	Sacramento.....	January, 1891.
John Swett.....	San Francisco.....	May 27, 1895.
Ralph Low.....	San José.....	May 20, 1892.
Lawrence Archer.....	San José.....	July 28, 1894.
Henry French.....	San José.....	March 28, 1895.
James Denman.....	San Francisco.....	April 20, 1893.

STATE NORMAL SCHOOL—LOS ANGELES.

Trustees.	Address.	Term Expires.
R. W. Waterman, Governor.....	Sacramento.....	January, 1891.
Ira G. Hoitt, Sup't Public Instruction.....	Sacramento.....	January, 1891.
C. F. Holder.....	Pasadena.....	April 28, 1895.
A. S. Davidson.....	San Bernardino.....	July 16, 1893.
W. W. Bowers.....	San Diego.....	July 16, 1894.
Stephen M. White.....	Los Angeles.....	July 16, 1892.
A. E. Pomeroy.....	Los Angeles.....	July 16, 1895.

STATE NORMAL SCHOOL—CHICO.

Trustees.	Address.	Term Expires.
R. W. Waterman, Governor.....	Sacramento.....	January, 1891.
Ira G. Hoitt, Sup't Public Instruction.....	Sacramento.....	January, 1891.
T. P. Hendricks.....	Chico.....	July 2, 1893.
John Bidwell.....	Chico.....	July 2, 1894.
Jesse Wood.....	Stockton.....	July 16, 1895.
A. H. Crew.....	Chico.....	July 2, 1891.
F. C. Lusk.....	Chico.....	July 2, 1892.

PRINCIPALS OF STATE NORMAL SCHOOLS.

C. W. Childs.....	Normal School, San José.
Ira More.....	Normal School, Los Angeles.
E. T. Pierce.....	Normal School, Chico.

WORK OF THE SCHOOLS.

The Prussian Minister of Education has said that Normal Schools were the key to the merits and defects of all schools, and it is becoming more evident each year that the "quality and quantity of professional training" among teachers indicates the "quality and quantity" of results obtained.

As regards the work done by our California Normal Schools, we have every reason to be encouraged, if not satisfied. None are resting in sluggish content, but all are endeavoring to make each year's work better than the last. The graduates are in great demand in most of the counties, and the percentage of failures among them is comparatively small.

The San José school graduated in 1889 one hundred and twenty-nine students, and in 1890 one hundred and fifty-seven students.

The Los Angeles school graduated during the same years one hundred and three students, together with four from the Post Graduate course.

The Chico school was opened in September, 1889, and during the year enrolled about one hundred pupils. It will graduate its first class in June, 1891.

A fine gymnasium has been built for the Los Angeles school, under an appropriation from the last Legislature of \$10,000. One thousand dollars' worth of the most improved apparatus has been purchased for it, and it is admirably adapted to secure the best physical training. All the students, both male and female, are required to take gymnasium work at regular hours, under the direction of an instructor in physical culture. There are now three hundred and thirty-five students in the school proper, and one hundred and fifty in the practice school.

Manual training has received a good deal of attention at the San José school during the past two years, and the results have been most satisfactory.

The Normal class of the Girls' High School in San Francisco has no State support. It does good work, and has furnished some of the best teachers in the State. The law now allows the recognition of San Francisco Normal diplomas, but such recognition is not, I regret to say, generally conceded.

Our corps of Normal teachers gains in membership every year. We have now thirteen hundred and twenty Normal graduates employed throughout the State, nine hundred and sixty-six of whom are graduates from our own schools. In 1889, the number employed was one thousand one hundred and sixty-one, showing a gain in one year of one hundred and fifty-nine.

Our Normal Schools are keeping up with the times, and were never in better condition than now.

RULES OF THE JOINT BOARD OF NORMAL SCHOOL TRUSTEES.

1. The length of the course of study for graduation is *three years*; namely, one year Junior, one year Middle, and one year Senior.

2. The Board of Trustees of either school may, when they think it expedient, open and provide for a Post Graduate course of one year, open only to graduates of the California State Normal Schools.

3. Pupils who make a satisfactory record in all the studies of the regular or three years' course, either upon examination or by class work in the school, and who are recommended by the Faculty of the school as in every way entitled to the same, shall be granted the diploma of the schools; *provided*, that the entire Senior year must be passed in the school giving the recommendation.

4. Pupils completing the Post Graduate course as above shall be granted a Post Graduate diploma. At least five months of the Post Graduate course shall be taken in the school granting the advanced diploma.

5. The number of terms in the year, the time of opening and closing of terms, the arrangement of vacations, the time of graduation, and the order of succession of studies in the prescribed course, shall be fixed for each school by its local Board of Trustees.

LIST OF TEXT-BOOKS.

Readers, Speller, Grammar, History, and Arithmetic—State Series.
 Olney, or Wentworth and Hill, for additional work in Arithmetic.
 Geography—Harper's, until State Geography is ready.
 Algebra, Geometry, and Trigonometry—Wentworth.
 Physical Geography—Appleton.
 Word Analysis—Swinton.
 Composition—Chittenden.
 Rhetoric—Kellogg.
 English Literature—Shaw, Backus.
 Physiology—State.
 Zoölogy—Colton.
 Botany—Rattan and Gray.
 Physics—Gage.
 Astronomy—Rolf and Gillett.
 Geology—Le Conte's Compendium.
 Chemistry—Mead's Chemical Primer or Cooley's Chemistry.
 Civil Government—Child's Topical Analysis of History and Constitution.
 Bookkeeping—Child's Essentials.
 Political Economy—Laughlin.
 Penmanship—Payson & Dunton.
 Drawing—Garin.
 Latin—Harkness' Latin Grammar, Jones' Latin Reader, Hansen's Latin Prose Composition.
 Pedagogy—Swett, with Hewitt, Compayré, or some other work selected by the Faculty.
 Psychology—Rosenkranz.
 NOTE.—No text-book has been adopted in General History. The Faculty at San José recommend Sheldon's General History for use in the Post Graduate year.

COURSE OF INSTRUCTION.

Junior Year.

Professional.—Methods of Study based upon Psychology, six weeks. Morals and Manners, four weeks. Number Methods, five weeks. Geography Methods, five weeks.

Language.—Word Analysis, including Spelling, ten weeks. Sentence Building and Composition, ten weeks. Composition and Literary Reading, twenty weeks.

Mathematics.—Arithmetic and Number Methods, ten weeks. Bookkeeping, including Penmanship Methods, ten weeks.

Science.—Botany and Methods, twenty weeks. Zoölogy and Methods, fifteen weeks. General Physiology, five weeks.

Miscellaneous.—Drawing, ten weeks. Reading, ten weeks. Drawing and Methods, ten weeks. Geography, ten weeks.

Exercises.—Music twice a week. Spelling, with Penmanship, twice a week, from which all who show themselves, upon examination, to be proficient, are to be excused. Delsarte Exercises. General News. Six Lectures in Hygiene.

Middle Year.

Professional.—Pedagogy and Training School Observation, ten weeks.

Language.—Reading and Methods, twenty weeks. Language Methods, four weeks. Rhetoric, sixteen weeks.

Mathematics.—Geometry and Methods, twenty weeks. Algebra and Methods, twenty weeks.

Science.—Human Physiology and Methods, ten weeks. Physics and Methods, twenty weeks.

Miscellaneous.—History and Methods, twenty weeks. Drawing, ten weeks. Constitution, five weeks. Reviews, five weeks.

Exercises.—Music twice a week, once in each section. Manual Training. General News.

Senior Year.

Professional.—Pedagogy and Observation in Training School, ten weeks. Teaching in Training School, twenty weeks. Pedagogy, ten weeks. Methods, School Law, and School Government, ten weeks.

Language.—Literature, ten weeks. Grammar and Methods, twenty weeks.

Mathematics.—Arithmetic and Methods, twenty weeks. Geometry and Methods, ten weeks.

Science.—Chemistry and Methods, twenty weeks. Physics, ten weeks. Physical Geography, ten weeks.

Miscellaneous.—Drawing, ten weeks.

Exercises.—Music twice a week. Delsarte and Vocalization twice a week. Physical Exercise throughout the course.

Post Graduate Year.

Professional.—Philosophy of Education,* fourteen weeks. Philosophy of Education, fourteen weeks. Higher Methods, ten weeks.

Language.—Latin,* twenty weeks. Latin, twenty weeks.

Mathematics.—Algebra,* sixteen weeks. Geometry, fourteen weeks. Trigonometry, ten weeks.

Science.—Geology, ten weeks. Astronomy, ten weeks.

Miscellaneous.—General History,* ten weeks. Political Economy, fourteen weeks. Directed Reading,* ten weeks.

Exercises.—Vocal Music and Methods in Music.

* Recognizing that this course is very heavy, even for a teacher, the Faculty recommend that as much of the Post Graduate work as possible be mastered before entering the class. The subjects recommended for study before entering the class are starred above.



STATE NORMAL SCHOOL, SAN JOSÉ.





STATE NORMAL SCHOOL, LOS ANGELES.



STATE NORMAL SCHOOL, CHICO.

ASYLUMS RECEIVING STATE AID.

The law makes it the duty of the Superintendent of Public Instruction to visit and inspect the following named institutions:

Sacramento Protestant Orphan Asylum.....	Sacramento.
Pacific Hebrew Orphan Asylum.....	San Francisco.
San Francisco Almshouse.....	San Francisco.
San Francisco Female R. C.....	San Francisco.
St. Joseph's Infant Orphan Asylum.....	San Francisco.
Ladies' Protective and Relief Society.....	San Francisco.
San Francisco Protestant Orphan Asylum.....	San Francisco.
Good Templars' Home for Orphans.....	Vallejo.
Pajaro Vale Male Orphan Asylum.....	Watsonville.
St. John's Orphan Asylum.....	San Juan, San Benito County.
Female Orphan Asylum.....	Santa Cruz.
Los Angeles Orphan Asylum.....	Los Angeles.
Los Angeles Orphans' Home.....	Los Angeles.
Ladies' Relief Society.....	Oakland.
St. Vincent's Male Orphan Asylum.....	San Rafael.
Home of Benevolence.....	San José.
St. Vincent's Orphan Asylum.....	Santa Barbara.
Grass Valley Orphan Asylum.....	Grass Valley.
Home for Feeble-Minded Children.....	Santa Clara.

These institutions have been inspected officially by the Superintendent or his Deputy. They have generally been found in good condition. To this rule there are very seldom exceptions. The children receive careful attention as to health and comfort, as well as in the matter of morals and manners.

The children of several of these asylums attend the public school, where they receive a better and more systematic and thorough mental training than they would be likely to receive elsewhere.

We note with satisfaction that in several instances considerable attention has been given to industrial training. The efforts in this direction should be encouraged, and the work carried to a much greater extent. In that way the children will be led to respect labor and learn self-reliance. The education given to the inmates of our orphan asylums should make the pupils self-helpful and self-reliant when it shall become necessary for them to depend upon themselves. For the most part, the course of instruction given in these institutions is commendable; there are, however, some instances where improvement ought to be found.

SACRAMENTO PROTESTANT ORPHAN ASYLUM.

There are one hundred and twenty children from two to fourteen years of age in this institution.

The school is in a separate building, but within the same inclosure, and is under the supervision of the City School Department. The pupils stand equally well with those of the other public schools. The care given to the children and the neatness displayed about the buildings leave no room for criticism. A kindergarten class is much needed, and should be opened at an early day. The system of heating the rooms, by small grates, is not equal to the demands of so large a building.

PACIFIC HEBREW ORPHAN ASYLUM.

This institution is a model of its kind. The sleeping apartments, kitchen, dining-room, bath-rooms, and playground, and, in fact, every part of the institution is kept in excellent condition. The children attend the public schools. There are also two evening classes, to aid such as need special assistance. This institution has a well selected library, which is a potent help in the development and training of the young, if properly used.

THE SAN FRANCISCO ALMSHOUSE

Has long been under excellent management, and is still a credit to the city and the State.

LADIES' PROTECTIVE AND RELIEF SOCIETY OF SAN FRANCISCO.

Everything in and about the institution was neat and clean; the dining-room, laundry, kitchen, and dormitories were in a condition which indicated good management and excellent care.

There are about two hundred and twenty children in the institution, twenty of whom are mere infants, and about thirty others in the kindergarten department. The remainder of the number range from six to fifteen years of age, and are divided into classes corresponding to the primary grades and lower grammar grades of the public schools. The exercises of the kindergarten department were pleasing. The children are taught to use their hands and eyes, and the walls of the room were quite handsomely decorated with their handiwork. Better work should be done in the primary departments. There seemed to be a lack of spirit on the part of both the teacher and pupils in the lowest primary room. The teacher would be much benefited, and her pupils would improve much more rapidly, if she would seek some professional training for her work. There are too many pupils in the class-room for one teacher. In the next higher class-room the regular teacher was absent, and a young girl in charge. A brief examination of the class indicated a like condition of things as found in the room last mentioned. In the highest room quite a different state of things was found. The teacher and pupils were in sympathy, and the exercises in reading, arithmetic, spelling, writing, history, word lessons, and singing, with a single exception, did credit to both teacher and pupils. The girls are required to change their aprons and the boys their outer garments between the playground and the school-rooms in all of the classes, hence they appear neat and tidy, with bright, clean faces and well kept hair, while their morals and manners seem to be well directed. The yards have been planked since my visit last year, but the building in some parts needs new flooring, and the interior is sadly in need of repairs and paint.

SAN FRANCISCO PROTESTANT ORPHAN ASYLUM.

The Protestant Orphan Asylum is an excellent representation of the bright side of sorrow. It is in its way a model home. There are one hundred and ninety-seven inmates, about half of whom are boys and half girls, divided into a nursery, a kindergarten, two primary, and one

grammar department. The kindergarten exercises were well conducted, and, in addition to these, the little children are taught to advance to the center of the room from opposite sides and greet each other by shaking hands in a graceful manner, and retire to their respective places. The work in all the other classes is in good hands, and some of the results will compare favorably with the best work done in the public schools, the only drawback in the school work being found in the fact that when the children are old enough and far enough advanced to enter the highest grades they usually find homes outside the institution. The spirit of the entire school is good. The children are taught to cultivate flowers around the schoolyard, and the older girls are taught to sew and assist about the institution in caring for the little ones. At meal times the children are particularly orderly, and are served with good, wholesome food, and plenty of it.

An inspection of every part of the building showed everything to be scrupulously neat and clean. The children are kept in a tidy, healthy condition, and are cheerful and happy. A new dormitory is nearly completed for the boys. Some new modern furniture is needed in one of the school-rooms, and the schoolyard ought to be planked.

THE HOME OF BENEVOLENCE,

At San José, contained fifty-six inmates at the time of our visit—thirty-two boys and twenty-four girls—ranging in age from infancy to fourteen years. The children who are of suitable age attend the public schools. The girls are taught to sew and do housework. The boys make their own beds and give such other assistance about the place as may be required of them and they are capable of rendering. The visit afforded us satisfaction.

ST. VINCENT'S MALE ORPHAN ASYLUM,

Near San Rafael. Since my last visit a new building has been erected, and other improvements have been made about the place. The determination on the part of the new President, expressed at my former visit, to improve the condition of the institution, has been carried into effect.

The most of the teaching is done by Sisters, of whom there are now eight employed. The work in the class-rooms, in some cases, is done by teachers who have had experience in the public schools, and is well performed. In other rooms it is fairly good, and in others still it should be improved. The condition of the kitchen, store-rooms, bakery, meat-room, dining-room, and dormitories was found to be good. The boys are well fed, and apparently comfortable, contented, and happy.

No one who will take the trouble to visit these institutions will question the wisdom of the State in giving them its support; provided, always, that they are properly administered. They not only relieve but also prevent much distress and suffering, and train to useful citizenship those who might, and undoubtedly would, otherwise become criminals.

FEMALE ORPHAN ASYLUM

At Santa Cruz is a well managed institution. Everything about the premises is scrupulously neat and clean. The girls are taught plain and

fancy sewing, and are successfully trained in the culinary arts. Their singing was excellent, and much of the school-room work commendable. Better means of ingress and egress should be provided for the dormitories, to secure the safety of the girls in case of fire. Morals and manners receive careful attention.

PAJARO VALE MALE ORPHAN ASYLUM,

At Watsonville, has made some improvement since our first visit. There is still room for much more improvement in the care of the premises, and in the attention paid to the personal neatness of the boys.

LOS ANGELES ORPHAN ASYLUM.

The premises were particularly neat. The children are well cared for, but when established in the new fine brick building in process of erection, will be much better off. The method of instruction in the school-room is very far behind the times. The teachers should keep up with the educational progress of the day, modernize their system, and make it more in keeping with that followed in the public schools.

LOS ANGELES ORPHANS' HOME

Is in good condition, and enjoying the new and commodious quarters into which they have moved during the past year. The children who are of suitable age attend the public schools.

OAKLAND LADIES' RELIEF SOCIETY.

There is no institution in the State that receives better management than this. There are one hundred and three inmates, ranging from two to thirteen years of age, two thirds of whom are boys.

Neatness and cheerfulness prevailed, and the boys were especially gentlemanly in their deportment.

The dormitories, kitchen, dining-room, laundry, wash-rooms, and play-rooms were immaculate in their appearance. The children are given plenty of good, wholesome food, and are neat and clean in their clothing, and all in good health.

The older girls are taught sewing and housework, and especial attention is paid to teaching morals and manners.

About thirty of the younger children attend a kindergarten in a well arranged and well furnished room in the building, and about sixty-three of the older ones attend the public school of Temescal, only a couple of blocks away.

One commendable point about the attendance of these children at the public school is the fact that they cannot be distinguished by their dress from other children, there being no uniformity of colors worn.

THE GRASS VALLEY ORPHAN ASYLUM

Continues to be well managed. The departments for boys and girls are in separate grounds, and both are under the care of the Sisters. The school-room work is well done.

THE GOOD TEMPLARS' HOME FOR ORPHANS,

At Vallejo, has four teachers. The grading of the classes and the educational work are somewhat like that in the public schools, the difference being in the fact that as soon as good places are found for the pupils they are permitted to leave the institution, and others come in to fill their places, consequently the efficiency of the schools in this and kindred institutions cannot be so well maintained as in the public schools. There has been improvement since our last visit in the care of the halls and school-rooms. As a whole, this institution is in good condition, and doing good work.

DEAF AND DUMB AND BLIND ASYLUM.

The institution for the education of the deaf and dumb and the blind is a part of the public school system of the State, and as such properly comes within the purview of this report. The institution is located at Berkeley, upon grounds and in buildings admirably adapted to the purposes of such a school. The number of pupils under instruction during the two years ending June 30, 1890, was two hundred and nine. Forty-one pupils have been graduated and discharged, leaving one hundred and sixty-eight names on the register at the close of the fiscal year. Since the opening of school this number has been increased to one hundred and eighty-one.

Much improvement has been made during the two years in the matter of providing for the comfort of the pupils, and enlarging facilities for the conduct of their education. The school building has been carried up another story, and a fine assembly hall and class and art rooms thus added sufficient for the needs of the institution for a number of years. A new home for girls has also been built, which provides accommodation for the home life of about fifty more girls. The great advantage of the segregated building plan is shown in the facility with which provision can be made for additional pupils from time to time without interfering with the unity or comfort of the school.

The Principal reports that the health of the pupils during the two years has been excellent, and that no death has occurred in the institution for over four years. On the whole we have reason to believe that the institution is doing its beneficent work successfully and economically.

ST. JOHN'S ORPHAN ASYLUM,

At San Juan, is in charge of the Sisters, and was found in a satisfactory condition, except that some new school furniture is much needed, and the drainage should be improved. The children appear to be healthy and happy, and are pursuing a similar course of study to other like institutions.

ST. JOSEPH'S INFANT ORPHAN ASYLUM,

At South San Francisco, contains three hundred children, only one third of whom are boys. They range in age from one week to fourteen years, though nine tenths of them are under nine years. The boys are transferred to St. Vincent's Orphan Asylum at the age of eight or nine years. The institution is managed by the Sisters, of whom there are

sixteen. The rooms are comfortably furnished, the ventilation and drainage are excellent, and every part of the buildings, from kitchen to dormitory, is kept in a scrupulously neat and clean condition. The children are tidy, healthy, and apparently happy. There was but one of the entire three hundred on the sick list at the time of our visit. This institution is managed with credit to all concerned.

FEMALE ORPHAN ASYLUM (ROMAN CATHOLIC),

South San Francisco, is on the same tract of land as the St. Joseph's Infant Orphan Asylum. It is in charge of twenty Sisters and four assistant teachers. There were four hundred and forty-nine girls in the institution at the time of our visit, only three of whom were in the infirmary. The number of inmates varies from month to month. The buildings are admirably suited to their purpose. The girls are taught to assist about the work of the house and to do sewing. Morals and manners are well cared for. The singing is good, but the school-room work, as a whole, is not and cannot be expected to equal that in the public schools. In all other respects the condition and management of this asylum is much to be commended.

HOME FOR FEEBLE-MINDED CHILDREN.

This institution is one of the most important and best conducted in the State.

The pioneer in the movement for establishing this Home for unfortunates was Mrs. Julia M. Judah, of San Mateo, who, with two earnest co-laborers, Mrs. Kate B. Lathrop and Colonel Wm. Harney, have worked unceasingly and with pure devotion to perpetuate and popularize this humanitarian work. The Home became a State institution in March, 1885, and was opened for admission of inmates in December of the same year. Beginning with twenty inmates, it soon became apparent that the accommodations would have to be greatly enlarged, which was done by the legislative appropriations of 1887, and again, in 1889, authority was given by the Legislature to purchase a larger site and erect new buildings. This was accordingly done, and the new Home was located at Hillgirt, near Glen Ellen, in Sonoma County.

The erection of permanent buildings on the new site is proceeding as rapidly as possible, in view of the fact that it has long been impossible to provide for the numerous applicants as rapidly as demands were made.

The new tract contains one thousand seven hundred acres, with four hundred acres ready for cultivation. There are already on the place from sixty to seventy thousand fruit trees and sixty acres of bearing vineyard, and, altogether, the future prospects are very flattering.

The President's report says: June 1, 1890, the membership was one hundred and nineteen, with eighty-nine applications for admission on file, and seventy-seven sets of application papers not yet on file.

There is no institution in our State for which the appropriations are so richly deserved or more judiciously and economically expended.

The Trustees receive no salary, but freely give of their time, their labor, and their substance to forward their humane work.

COUNTY SUPERINTENDENTS—1891-1895.

COUNTIES.	Name.	Post Office Address.
Alameda	George W. Frick	Oakland.
Alpine	Mrs. Anna M. Arnott	Markleeville.
Amador	George F. Mack	Ione.
Butte	G. H. Stout	Cherokee.
Calaveras	Wm. M. Nuner, Jr.	San Andreas.
Colusa	Mrs. H. L. Wilson	Colusa.
Contra Costa	W. A. Kirkwood	Martinez.
Del Norte	Mrs. S. G. Wright	Crescent City.
El Dorado	C. B. Wakefield	Placerville.
Fresno	Thos. J. Kirk	Fresno.
Humboldt	J. B. Brown	Eureka.
Inyo	J. H. Shannon	Bishop Creek.
Kern	Alfred Harrell	Bakersfield.
Lake	Mrs. E. K. Harrington	Lakeport.
Lassen	Mrs. M. P. Woodin	Bieber.
Los Angeles	W. W. Seaman	Los Angeles.
Marin	Robert Furlong	San Rafael.
Mariposa	Mrs. Wm. D. Egenhoff	Mariposa.
Mendocino	W. K. Dillingham	Ukiah.
Merced	J. A. Norvell	Merced.
Modoc	J. A. Vergon	Alturas.
Mono	Cornelia Richards	Bridgeport.
Monterey	Job Wood, Jr.	Salinas.
Napa	Anna E. Dixon	Napa City.
Nevada	W. J. Roger	Nevada.
Orange	J. P. Greeley	Santa Ana.
Placer	O. F. Seavey	Auburn.
Plumas	B. R. Foss	Quincy.
Sacramento	B. F. Howard	Sacramento.
San Benito	J. N. Thompson	Hollister.
San Bernardino	G. W. Beattie	San Bernardino.
San Diego	Harr Wagner	San Diego.
San Francisco	John Swett	San Francisco.
San Joaquin	George Goodell	Stockton.
San Luis Obispo	W. M. Armstrong	San Luis Obispo.
San Mateo	J. F. Utter	Redwood City.
Santa Barbara	G. E. Thurmond	Carpenteria.
Santa Clara	L. J. Chipman	San José.
Santa Cruz	John W. Linscott	Watsonville.
Shasta	Miss E. G. Welsh	Redding.
Sierra	T. J. McGrath	St. Louis.
Siskiyou	John Kennedy	Yreka.
Solano	C. B. Webster	Fairfield.
Sonoma	Mrs. F. McG. Martin	Santa Rosa.
Stanislaus	W. B. Howard	Modesto.
Sutter	G. B. Lyman	Yuba City.
Tehama	Belle Miller	Red Bluff.
Trinity	George E. Noonan	Weaverville.
Tulare	Samuel A. Cruikshank	Visalia.
Tuolumne	G. P. Morgan	Columbia.
Ventura	Samuel T. Black	Ventura.
Yolo	George Banks	Woodland.
Yuba	H. H. Folsom	Marysville.

CITY SUPERINTENDENTS OF SCHOOLS.

D. J. SULLIVAN.....	Alameda.
W. M. FREISNER.....	Los Angeles.
H. H. FOLSOM.....	Marysville.
J. W. McCLYMONDS.....	Oakland.
WILL. S. MONROE.....	Pasadena.
F. A. MOLYNEAUX.....	Pomona.
C. H. KEYES.....	Riverside.
ALBERT HART.....	Sacramento.
A. D. TENNY.....	Salinas.
EUGENE DE BURN.....	San Diego.
JOHN SWETT.....	San Francisco.
F. P. RUSSELL.....	San José.
A. L. KELLOGG.....	Santa Clara.
W. R. LEADBETTER.....	Stockton.
J. M. CHASE.....	Vallejo.
C. J. GIDDINGS.....	Visalia.

PRINCIPALS OF HIGH SCHOOLS.

PRINCIPAL.	Address.	County.
J. B. McChesney	Oakland	Alameda.
S. D. Waterman	Berkeley	Alameda.
J. H. Firehammer	Alameda	Alameda.
Lizzie A. Packard	Los Angeles	Los Angeles.
C. S. Smyth	San Rafael	Marin.
A. D. Tenny	Salinas	Monterey.
T. L. Heaton	Fresno	Fresno.
T. B. Gray	Nevada	Nevada.
J. M. McFetridge	Grass Valley	Nevada.
James H. Pond	Sacramento	Sacramento.
Frank H. Hyatt	San Diego	San Diego.
Mrs. M. W. Kincaid	2219 Pacific Street	San Francisco.
Frank Morton	1322 Ellis Street	San Francisco.
James G. Kennedy	Cogswell High	San Francisco.
Walter N. Bush	Commercial High	San Francisco.
Ham. Wallace	Stockton	San Joaquin.
L. D. Syle	Santa Barbara	Santa Barbara.
L. B. Wilson	San José	Santa Clara.
W. S. Hall	Gilroy	Santa Clara.
C. H. Crowell	Los Gatos	Santa Clara.
D. C. Clark	Santa Cruz	Santa Cruz.
J. S. Condon	Vallejo	Solano.
H. C. Petray	Santa Rosa	Sonoma.
I. S. Crawford	Petaluma	Sonoma.
H. R. Bull	Healdsburg	Sonoma.
Thos. Downey	Modesto	Stanislaus.
O. E. Graves	Red Bluff	Tehama.
	Tulare	Tulare.
	Ventura	Ventura.
R. F. Pennell	Marysville	Yuba.

PRINCIPALS OF GRAMMAR SCHOOL COURSE SCHOOLS.

PRINCIPAL.	Address.	County.
C. H. Clement	Livermore	Alameda.
H. W. Chapman	Haywards	Alameda.
George F. Mack	Ione	Amador.
John W. Reese	Plymouth	Amador.
H. F. Walter	Sutter Creek	Amador.
Warren Loree	Volcano	Amador.
Richard White	Chico	Butte.
John E. Hayman	Colusa	Colusa.
L. E. Vickers	Willows	Colusa.
O. E. Swain	Antioch	Contra Costa.
Clara K. Wittenmeyer	Martinez	Contra Costa.
J. H. Strine	Downey	Los Angeles.
James D. Graham	Pasadena	Los Angeles.
M. Manley	Santa Ana	Orange.
F. E. Crofts	San Rafael	Marin.
J. N. Flint	Black Point	Marin.
J. L. Shearer	Napa City	Napa.
Edward Hyatt	San Jacinto	San Diego.
B. B. Cory	Lodi	San Joaquin.
J. S. Moulton	Linden	San Joaquin.
Nicholas Messer	San Luis Obispo	San Luis Obispo.
James N. Selby	Nipomo	San Luis Obispo.
J. B. Hankenson	Paso Robles	San Luis Obispo.
J. F. Utter	Redwood City	San Mateo.
G. P. Hartley	Redwood City	San Mateo.
Holton Webb	Lompoc	Santa Barbara.
	Watsonville	Santa Cruz.
Emma Garretson	Benicia	Solano.
Ellsberry Newby	Suisun	Solano.
J. S. Brown	Rio Vista	Solano.
O. W. Grove	Cloverdale	Sonoma.
Lucie Fries	Sonoma	Sonoma.
Maggie Robb	Salida	Stanislaus.
Ella A. Zielian	Modesto	Stanislaus.
Clay C. Childress	Hanford	Tulare.
	Visalia	Tulare.

EXTRACTS FROM REPORTS OF COUNTY SUPERINTENDENTS.

ALAMEDA.

P. M. FISHER, County Superintendent.

The Alameda County Teachers' Institute met in Hamilton Hall, Oakland, October second, for a session of three days, with three hundred and fifteen teachers in attendance. The Institute was conducted by County Superintendent Fisher, assisted by Dr. A. E. Winship, of the New England Journal of Education. Addresses were delivered on the "Boy; and How to Get Along with Him;" "The Coming American Philosophy;" "Old Field Schools and Old Field Schoolmasters;" the last named address being given by Dr. J. C. Simmons, of Colusa.

The teachers of the county outside of Oakland gave the Oakland City teachers a brilliant and enjoyable reception in Cavalry Hall on the second evening of the Institute. It was one of the most enjoyable meetings ever held by the teachers of the county, and added no little to the good feeling of the Institute. The teachers voted the addresses of the speakers profitable as well as entertaining, and the Institute was judged a success.

Expense of Institute was \$139 21.

Schools are doing well. Graduations continue to hold public interest and stimulate the pupils of the district schools. Property in excellent condition. Fine two-story buildings please the eye and fill a want in Warm Springs and Niles. Additional rooms have been built in Oakland, and two new High School buildings put up, one of which was destroyed by fire.

In the prosperous and progressive city of Alameda bonds have been voted, and at least one commodious building will be erected next year.

The excellent effects of the educational legislation of 1889 are being felt, and school officers, teachers, and the public indorse the work of that legislative body, and stamp it with their approval. In my judgment the school law of the State is now in better shape than it has been for many years, and the recent amendments show decided progress in the direction of making the school system as perfect as it is possible for human imperfections to make it. In all that recent impulse in this direction, Superintendent Hoitt has been enthusiastic, sagacious, and determined, filling his place with credit, true to the wants of teachers, and faithful to the duty he owes the State.

ALPINE.

HARRIET A. GROVER, County Superintendent.

The schools of this county have made fair progress the past year. Some improvements have been made on school property.

School houses are in good condition.

The financial condition of our schools is slightly improved.

No district has had less than seven months' school, and with strict economy an eight months' school could be maintained.

This county holds no Institute.

AMADOR.

GEORGE F. MACK, County Superintendent.

A very instructive three days' session of the Teachers' Institute was held in Jackson October 23, 24, and 25, 1889. Prof. C. H. McGrew, of San José, Institute Conductor.

Much interest—amounting to enthusiasm—prevailed. Only a few years ago the County Board of Education was devising means by which to compel the attendance of teachers at these annual gatherings, but now it is very different. Our Institutes, for the past two years, have been productive of much good. Teachers realize this truth, and, as a consequence, we had but three absentees from our gathering this year, and those solely on account of sickness—self or family.

By unanimous vote, the County Superintendent was requested to have the next year's Institute convene for four days instead of three. Our roll call numbered fifty-four names out of a possible sixty-one active members and several honorary members.

Expense of Institute, \$112 50.

The public schools of "Little Amador" are prospering. Greater interest in school matters is manifest in every way; an increased number of visits from Trustees and patrons; a larger average session than previous years; and, although fewer children are reported on the census returns, yet there has been, during the past year, a greater average daily attendance. The purchase of much patent furniture, increased facilities and accommodations for pupils, the building and relocating of several school houses nearer a traveled road, the increase in teachers' salaries, and the desire to organize new districts, all go to prove that the schools of the county have an upward tendency.

BUTTE.

D. W. BRADDOCK, County Superintendent.

It is most gratifying to be able to report once more a most prosperous school year. We have just closed the longest term ever held in the county, averaging a fraction over eight months, and 50 per cent of the children have had access to schools running nine months. The Board of Supervisors is entitled to much credit for its liberality in fixing the county school tax rate to meet the demands of the department. There is now, at the close of the school year, an average balance per district of \$357. This enables the Trustees to make necessary repairs and procure suitable furniture. Nor will teachers be compelled to wait until January for their money or have their orders discounted.

Eighty per cent of our teachers are first grade, and 65 per cent of these hold life or educational diplomas.

Our Institute at Chico, last December, was well attended, and much good work was done.

State Superintendent Hoitt was present and rendered valuable assistance.

Teachers' Institutes have done much toward establishing uniform methods of teaching—and better methods. We are advancing, moving forward; slowly, probably, but nevertheless progressing.

CALAVERAS.

WM. N. NUNER, JR., County Superintendent.

The County Institute was held at Mokelumne Hill, opening Tuesday, October 15, 1889, and closing Friday, October eighteenth.

The session lasted four days, and was conducted by Superintendents J. L. Wilson, of Colusa, and P. M. Fisher, of Alameda.

Fifty-seven teachers were present. Lectures were delivered by the following named gentlemen: Rev. A. K. Crawford, subject, "What Has Religion to Do with the Public School?" Supt. P. M. Fisher, subject, "Public Schools;" Supt. J. L. Wilson, subject, "Benedict Arnold."

The expenditures, not including what was donated by the residents of Mokelumne Hill, amounted to \$143.

It was thought that the interest manifested at Murphys last year could not be surpassed; but this was called "the Institute of all Institutes," for the enthusiasm and ardor shown by the teachers, and also the residents of Mokelumne Hill.

The teachers deeply regretted the absence of our genial and popular State Superintendent.

It was the unanimous opinion that Institutes add much to the educational stimulus of the teachers, and could such men as Messrs. Fisher and Wilson be obtained for conductors, there would never be any lack of interest on the part of the teachers.

I would suggest that the school law be so amended that the School Superintendent's office be abolished; that is, if provisions are not made so that he may devote his whole time to the supervision of the schools. If a county has not a sufficient number of schools to maintain a Superintendent's office, let two or more counties unite and select an able man for the position.

COLUSA.

MRS. H. L. WILSON, County Superintendent.

The Teachers' Institute of Colusa County for 1890 convened in Wil-
lows, November 4, 1889, and continued in session to and including Novem-
ber eighth. Of the eighty-six teachers in the county, all but one attended
the Institute. The forenoon sessions were devoted to the reading of papers
on important educational topics by teachers of the county, to thorough
discussion of such topics by the Institute, and to class exercises practi-
cally illustrating the methods of instruction. Papers read were: "Mental
Growth," by C. L. Lathrop, and "School-Room Tyranny," by W. M. Finch.
Prof. E. T. Pierce discussed United States History. Arithmetic was

divided into subjects, and was ably handled by the following teachers: "How to Teach Fractions," by George F. Myrick; "How to Teach Percentage," by W. L. Gay; "Practical Applications of Arithmetic," by Messrs. O. B. Parkinson and Howard Ford. Class exercises were as follows: "Paper Modeling," by Miss Mallie Bowling; "Arithmetic," by Miss Kate E. Johnson; "Bookkeeping," by Prof. L. E. Vickers.

The Institute and people of Willows were highly entertained and instructed by the able lectures delivered each evening. They were fortunate in having with them the learned Dr. A. E. Winship, of Boston, editor of the "New England Journal of Education," who completely captured our Institute with his genial, whole-souled manner, and his eloquent and instructive lectures. Dr. C. C. Stratton, of Mills College, Oakland, as is his wont, delivered a highly instructive and thought-producing lecture on "Our Times and Their Needs." Hon. Ira G. Hoitt gave the Institute valuable service, and favored all with a lecture. Prof. E. T. Pierce, of the Chico Normal, was of inestimable assistance to the Institute in his talks and discussions. Prof. Keith, of Pierce Christian College, gave an instructive lecture on the "Chemistry of a Raindrop;" and Prof. Wm. Henslee, of the Orland Normal, addressed the people in an interesting lecture on "The Teacher."

At the close of this Institute, at a banquet given the teachers by the liberal, appreciative, and courteous people of Willows, the Institute presented to their Superintendent a handsome gold watch and chain, a fitting token of their high esteem for him. And for the first time in his life, this expression of the affection of his teachers so overcame him that, as he expressed it, he could hardly rise, or stand after having risen. But he very feelingly accepted the gift, and wore it with pride and enjoyment during the few months of life that remained to him.

The marked prosperity of our schools, spoken of in last year's report, continues. Our teachers have been as liberally paid, and have maintained nearly the same high average length of term, notwithstanding the severity of our winter.

The average wages show a small increase over that of last year. Average for 1890, \$76 53. The fact that the Trustees are able to maintain this high average is, of course, due to the liberality of our Board of Supervisors. Our county fund far exceeds the State fund.

Our teachers show their desire to reach the top rung of the ladder by the number of Grammar Grade and Grammar School Course certificates reported.

For the first time since 1882 the Superintendent has failed to visit the schools of his county. This was on account of sickness, which terminated fatally to him on the sixteenth of March, 1890. His untimely death is an irreparable loss to the schools of this county, for in him they had a true friend, the teacher a strong support, and the school children an example of purity, integrity, and true manhood.

CONTRA COSTA.

W. A. KIRKWOOD, County Superintendent.

The Contra Costa County Teachers' Institute convened in Martinez, September 18, 1889, and continued in session three days.

Professor Allen, ex-Principal of the San José State Normal School, was the Conductor of the Institute, ably assisted by our Superintendent of Public Instruction, Ira G. Hoitt, who spent two days with the Institute, giving much valuable instruction and several very interesting talks. All the teachers in the county were in attendance at the Institute. Much interest was manifested, and many spirited debates held.

The subject of the American flag was ably discussed, and placing the flag in every school house was enthusiastically indorsed.

State Superintendent Ira G. Hoitt lectured to a large and appreciative audience in the Martinez Opera House on Thursday evening, September 19, 1889. Subject of lecture: "Graces and Follies of the Teacher's Life."

Expenses of Institute: Conductor, \$75; hall rent, \$20; total, \$95.

The schools of Contra Costa County are in a prosperous condition. They were never as well off financially as they are to-day. Every district in the county, without exception, has funds sufficient to maintain a nine months' school.

Our school houses as a rule are neat, commodious, and substantial.

Antioch School District has just completed a handsome six-room building, with all modern improvements, at a cost of \$15,000.

Great interest has been taken by the Trustees in improving the school property during the past year.

The majority of our schools raised funds by subscription and purchased flags and poles, and with appropriate ceremonies unfurled the "Emblem of Liberty," to fly over the school houses on all appropriate occasions.

I would suggest that the school law be amended so that school elections may be held on Saturday.

DEL NORTE.

S. G. WRIGHT, County Superintendent.

In June, 1887, the Del Norte County Board of Education passed resolutions as follows: That examinations for promotion be held in June of each year, in all the public schools; that the Board of Education prepare questions for entrance to and promotion in the Grammar Grade, as well as for graduation; that the several teachers prepare questions for all grades below the third.

This change has worked most beneficially, exciting a hitherto dormant ambition in the pupils, and a more active effort on the part of the teachers.

Our course of study, however, is very defective. This year we will make a change, on trial, using the State course as a basis, on which we have grafted such changes or modifications as our needs seem to require.

In December, 1888, I drew up, at the request of the Board, a blank form for what we call "Grade Reports," which gives the standing of each pupil on the roll, the grade for the term, the promotion, if any, and the reason for failure, where failure exists. This holds the teacher somewhat more strictly, which here seemed very desirable, and serves as a convenient reference for a succeeding teacher.

The schools have thus received a much needed impetus, and we are doing better work in consequence.

It was a great disappointment to this county that the bill for a

County High School did not become a law. It is just what Del Norte needs, and I earnestly hope a successful effort to that same end will be made with the next Legislature.

EL DORADO.

C. B. WAKEFIELD, County Superintendent.

The Teachers' Institute for the school year ending June 30, 1890, was held in Placerville during April thirtieth and May first and second.

Forty-seven teachers were in attendance. Of all the teachers that could have legally been required to attend, only five were absent. Their excuses were considered good by the Board of Education. The disposition on the part of the teachers of this county not to evade attendance at Institute is to be commended. In further justice to them, too, it is to be said that the interest they take in the work, and the attention they give to it, generally gratifies not only ourselves here, but also the educational workers that we may have from abroad. While we like this, we hope to develop and show still more interest, enthusiasm, and ambition.

Prof. L. D. Syle, of San Francisco, acted as Conductor of the Institute. He was present during the whole session.

Prof. J. G. Kennedy, of the Cogswell Polytechnic School, was present during the last day of the Institute. He lectured in the evening on "Industrial Education."

Professor Syle also lectured one evening on "Some Defects in our Congressional Government."

A greater number of teachers than usual, too, took part in the actual work of the session. It is difficult to understand why it is that successful teachers, and those able to give valuable instruction to other teachers, are so modest or reluctant about appearing before their fellow teachers. It requires urging and sometimes almost entreaty to induce them to do so. Their work, however, well repays the effort.

The expenses of the Institute amounted to \$150—\$100 out of the unapportioned County Fund, and \$50 out of Teachers' Institute Fund.

I am now persuaded that the fall of the year would be for us a more beneficial time for holding our Institute. At least three fourths of our schools are taught during winter terms, and the good derived from an Institute would then more likely be put into active operation in the school-room. I now think, too, that at least a four days' session should be held. Better work, and less hurried work, could be done.

The school work in this county during the past year has been attended with better results than that of any year during the last four. This, too, considering the severe character of the winter, which impaired attendance greatly, and in some instances caused a number of the schools to close temporarily from time to time.

The more successful character of the work may be attributed to several causes, among which are:

An almost general harmony in nearly all the districts among the people, and between the people and the teachers. A teacher, under these circumstances, can work with more zeal, heart, and enthusiasm.

The retention of the same teacher in a greater number of the schools. Where a teacher has been at all successful, or at all capable, the benefit

to be derived from this course cannot be questioned. Where the teacher has given unusual satisfaction, or done unusually good work, the benefits are even more than proportionately great.

A greater number of higher grade teachers, especially those holding educational and life, State Normal School, and University diplomas.

A greater number of teachers that may be denominated "home teachers;" that is, those that have their homes here, or come from places where the life, customs, and sentiments of the people are similar to our own. This, I am persuaded, is more important than one would think, toward bringing about that general understanding and sympathy among parents, teachers, pupils, and community.

It was expected that all pupils in the county would be examined at the end of the term on the work they had done as outlined in the "Course of Study." It has not been possible to make such examination general. But where teachers and pupils expect a test of the work, a greater degree of responsibility is felt. An examination may not be the most adequate test, but it produces this good result at any rate.

Our moneys have been sufficient, not abundant. The average length of term is about the same as it was last year. In regard to attendance and school money, I believe it would be better if the school law were so modified as to make more of the money contingent on attendance. Let, say, \$400 be the uniform amount, with the remainder pro rata on attendance, money enough being provided to make the districts average \$500. This might promote better attendance.

The interest in school matters in a general way for the school year just closed, I may say, has been active. A greater number of districts are every year getting new and improved furniture, better and more useful apparatus, books of greater utility in the libraries, and are doing, in short, as much as may be, to make the schools both profitable and attractive.

Three new school houses have been built, and Georgetown has sold bonds to the amount of \$4,000, with which the district expects to build a new school building.

The "Grammar School Course" is being agitated in Placerville. An election will doubtless be called, and it is probable that the "course" will carry.

I feel that the outlook for next year is sufficiently bright.

FRESNO.

B. A. HAWKINS, County Superintendent.

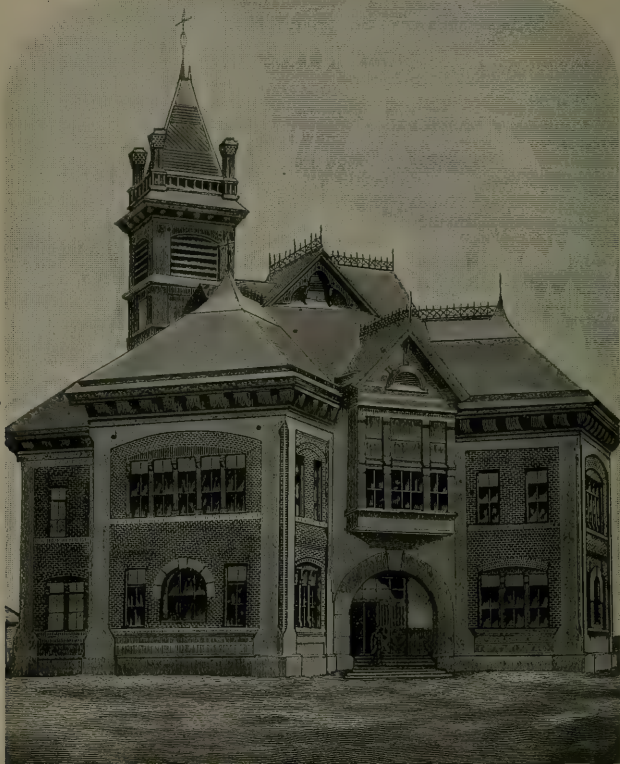
The County Teachers' Institute assembled on January 7, 1890, in the Central School Building, Fresno City, Cal., and continued in session for four days. It was conducted by the Superintendent of Schools, assisted by the teachers of the county. Valuable aid was given by Prof. C. H. Allen, Superintendent Ira G. Hoitt, Prof. William C. Jones, and Dr. C. C. Stratton.

Number of teachers present, one hundred and forty.

The amount of money expended, \$162.

Dr. C. C. Stratton delivered two lectures, on the following subjects: "The Personality of the Teacher," and "Potential Ideas."

State Superintendent Ira G. Hoitt lectured on two subjects: "Trials and Triumphs of our Profession," and "Character Building."



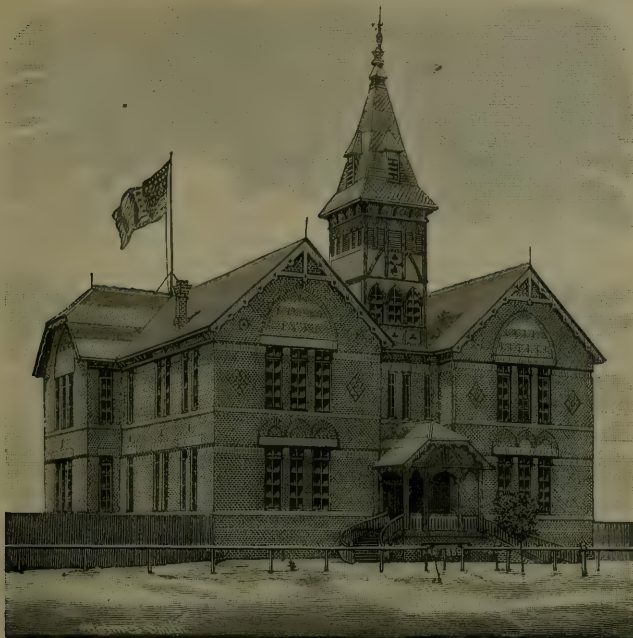
PUBLIC SCHOOL, K STREET, FRESNO.

Prof. William C. Jones lectured on "United States History as Taught in the University of California," and the "Relation of the University to the Schools of the State."

Prof. C. H. Allen lectured on "The True American Education."

We had a very interesting and profitable Institute. The teachers were very much interested in the work, and they were regular and punctual in attendance at every session.

Our schools are in good condition, and they are increasing in number, interest, and efficiency. I took charge of this office in January, 1883, and made my first report to the Superintendent of Public Instruction in July of that year. A comparison of my first report with the one now being made will show the progress of the schools for the last eight years.



PUBLIC SCHOOL, C STREET, FRESNO.

	1883.	1890.
Number of children between 5 and 17 years of age	2,985	6,903
Number of children between 5 and 17 years of age who attended public school	2,233	5,254
Number of school houses built of wood	50	119
Number of school houses built of brick	-----	3
Number of teachers employed	71	169
Number of teachers graduates of California State Normal School	5	35
Number of teachers graduates of other State Normal Schools	-----	15
Number of teachers holding life diplomas	5	28
Number of teachers holding State educational diplomas	5	24
Number of teachers holding Grammar Grade certificates	40	111
Number of teachers subscribing for Educational Journal	20	111
Rate of county school tax .....	.29	.15
County assessment roll	\$8,308,097 00	\$34,626,100 00
Amount received from county taxes	\$28,056 00	\$51,939 00
Visits made by County Superintendent	70	142
Number of teachers who attended Institute	64	140
Valuation of houses, lots, and furniture	\$47,160 00	\$285,770 00
Valuation of libraries	\$4,831 00	\$27,160 00
Valuation of apparatus	\$1,996 00	\$14,493 00
Number of volumes in libraries	1,610	9,044

HUMBOLDT.

J. B. BROWN, County Superintendent.

The Humboldt County Teachers' Institute convened in the Court House, in the city of Eureka, on Tuesday, October 2, 1889. Present, one hundred and twenty out of the one hundred and twenty-two teachers of the county, only one being absent without excuse, and that one alleged sickness afterward. Prof. W. W. Anderson, of the Hopkins Academy, Oakland, was present as Conductor, and State Superintendent Ira G. Hoitt was with us the entire week.

From all sources, after the Institute, came words of congratulation in regard to the success of the meeting. Professor Anderson and Superintendent Hoitt worked energetically and successfully during the entire session, and the Institute of 1889 was a pronounced success.

The schools are prosperous. Much has been done during the year in the building of school houses. Eureka has just completed a \$30,000 building, that is in all respects a credit to the city and Board of School Trustees, particularly John S. Murray, the very efficient Clerk of the Board, who from first to last was untiring in his efforts to produce a first class building with first class furnishing throughout. This building should appear in the Superintendent's report as the contribution of Humboldt County to the list of model school buildings for the year.

Several other districts have voted to raise, by sale of bonds, money for building purposes: Ferndale, \$10,000; Rohnerville, \$6,000; Union District (Arcata) will build next year, having voted \$10,000; Slide (Fortuna) has also voted \$6,000, which will be sold shortly.

INYO.

J. H. SHANNON, County Superintendent.

No Institute held in Inyo County for the past two years.

Our schools have not only held their own but have materially improved, with one or two exceptions. We have a good corps of teachers, but some had too much to do; too many pupils for one teacher, but not enough for two. Our largely increased accommodations for school work have created an incentive to send. In 1888-89, on a census population of six hundred and nine, the average daily attendance was three hundred and six. In 1889-90, on a census population of six hundred and seventy, the average daily attendance is three hundred and sixty-nine, giving a fair percentage of gain.

Bishop Creek has moved from two rooms, mere hovels, to a fine four-room building, three of which will be occupied during the coming year. Big Pine has changed from a \$100 prison to a well arranged, well seated school building, costing in all near \$3,000. Union, from no building, to one with furniture and improvements worth \$3,000. The pupils of Independence enjoy a \$5,000 building, while Warm Springs hold forth in a \$1,800 building, all erected within two years. Irving has spent \$225 on the school house, in ceiling, rustic, and paint, so, with two exceptions, the children of Inyo are comfortably housed, and are generally well taught.

The first amendment to the school law that I would suggest would be: The State, from its surplus School Fund, to purchase district bonds.

Second amendment—To place the selection of teachers into the hands of the County Board of Education, instead of Trustees, as at present.

Third amendment—To make the children of tax-paying Indians come fully under the school law, so far as census returns are concerned. Our tax-paying Indians have severed all tribal relations; in fact, the Interior Department has decided that all Indians living among the whites, and who are self-sustaining, are to be considered as having severed tribal relations and amenable to State laws.

On the two propositions just named, I shall probably explain reasons at next biennial meeting.

KERN.

ALFRED HARRELL, County Superintendent.

The Teachers' Institute convened at Bakersfield February twelfth, and remained in session for three days. All of the teachers in the county, with two exceptions, were present and took an active part in the proceedings.

Hon. Ira G. Hoitt, Dr. C. C. Stratton, and Prof. T. O. Crawford were in attendance and contributed much to the success of the day sessions, besides lecturing to large and attentive audiences in the evenings.

The expense of holding the Institute amounted to \$132.

It has occurred to me that much good could be accomplished, and better results obtained from Institutes, if the teachers could have the advantage of trained Institute Conductors, who should be regularly in the employ of the State.

The schools of this county are in good working order, well graded throughout, and in excellent financial condition.

Two new districts have been formed the past year—Vineland and Rosedale. Several districts, including the latter, will shortly submit propositions to vote bonds, or direct taxes, to provide increased school facilities.

By comparison, it will be seen that there is a marked increase, both in the census list and average attendance, for the past year.

I would again suggest that the County Superintendent be given some power in the matter of appointment of members of County Boards of Education.

LAKE.

J. H. RENFRO, County Superintendent.

The Institute was held at Upper Lake, commencing April twenty-ninth and holding four days. Prof. Charles H. Allen was the Conductor, and gave good satisfaction as instructor in the day sessions, and, in addition, delivering two evening lectures.

Forty-five out of a total of fifty teachers attended the Institute, displayed more than usual interest in the sessions, and received much valuable information.

Expense of Institute, \$89.

LASSEN.

MYRA A. PARKS, County Superintendent.

In regard to the condition of the schools in this county, I am pleased to be able to report a steady and gratifying progress.

During the past two years, seven of the thirty-two districts have constructed new school houses, neat and comfortable, and supplied them with suitable furniture. Several more are to be built in the near future, and extensive repairs are being made in many other districts.

As our county becomes more widely known and more densely populated, new districts are added to the list, so that in a few years no child in Lassen County need be deprived of the advantages of the public school.

Our teachers are advancing. We possess a comparatively young corps, who are, in the main, enthusiastic, progressive, and not afraid to work, although, as in all hives, a drone is occasionally found.

This county is at present better represented in the various Normal Schools of the State than at any previous period in its history.

LOS ANGELES.

W. W. SEAMAN, County Superintendent.

The twentieth annual session of the Los Angeles County Teachers' Institute opened on Monday, March seventeenth, at Turn Verein Hall, Los Angeles. A large number of teachers from other counties were present.

The opening addresses were made by County Superintendent W. W. Seaman, Charles L. Ennis, President of County Board of Education, and State Superintendent Ira G. Hoitt. Papers were read by Hon. Abbot Kinney, on "Arbor Day;" Superintendent Will S. Monroe, on "Science Work;" Prof. L. D. Brown, on "Patriotic Education," and Mrs. Clara A. Burr on "Delsarte Philosophy of Expression." On Monday evening Prof. John Dickinson delivered an interesting lecture on "The Geology of the Stars."

On Tuesday morning the Institute merged into the State Teachers' Association, held in the First Congregational Church, Los Angeles, which meeting continued three successive days, closing on Thursday afternoon.

The teachers of the Institute invited the State Teachers' Association to meet with them in a social reunion on Tuesday evening at Turn Verein Hall. A pleasing program was rendered, and an opportunity given for all to become acquainted. The success of this social reunion and that of last year, prompted a resolution, which was passed unanimously, whereby such a social reunion is to be made a part of the program at all our Institutes.

The Institute reconvened on Friday morning and continued work. Addresses were made by Miss Alma S. Brigham on "Physiology;" Miss Helen Mar Bennett, on the "Delsarte System of Expression;" James L. Smith, on the "Discipline of Experience;" Mrs. C. P. Bradfield, on "Drawing;" Prof. Melville Dozier, on "Geography," and Prof. E. P. Rowell, on the "Teacher in the Community."



HIGH SCHOOL BUILDING. LOS ANGELES.

There were three hundred and ninety teachers present.

During the past year our schools have made marked progress, and in closing, we find them in a very satisfactory condition. Our policy has been to place, so far as possible, experienced teachers or Normal School graduates in charge of the schools, and to-day we are feeling throughout our county the effects of their work.

Notwithstanding the fact that in August, 1889, Orange County was organized, taking from Los Angeles County thirty-one districts, seventy-two teachers, four thousand and ninety-five census children, and one thousand five hundred and twenty-three children under five years of age, we have, when the above figures are deducted, increased our daily attendance over that of 1888-89, and also have increased the number of teachers employed.

As yet only two Grammar School Course schools have been established, and with the present provision of the law regarding these schools, no encouragement is held out to establish them.

During the year, one hundred and forty-one pupils were graduated from the Grammar Schools, and nine from the Grammar School Course schools.

MARIN.

ROBT. FURLONG, County Superintendent.

Institute session for the school year ending June 30, 1890, was held at San Rafael during the week beginning March 31, 1890. Every teacher in the public schools of the county was present during the session. Several visitors and teachers from private schools also attended.

The Instructor for the first three days was L. D. P. Syle, A.M., who spoke at the opening on "How to make Institutes Most Beneficial." Mr. Syle presented the subjects of "School Government," "Arithmetic," "Aids and Manner of Teaching Geography," and "Literature," during Tuesday and Wednesday's sessions, lecturing on Tuesday evening on "Travels in Europe." Superintendent W. S. Monroe, during Thursday and Friday, addressed the teachers on "The Child We Teach," "Language Work," "What Teachers Should Read," "Manners and Morals," "Science Teaching," "Reading," and other topics.

Hon. Ira G. Hoitt, Superintendent of Public Instruction, was in attendance on Tuesday and addressed the Institute, speaking in general upon educational work in California.

One new feature of the session was an examination in school law, conducted by the County Superintendent of Schools, during the first day. Twenty questions on school law were submitted and written answers required. The examination was successful, as its announcement, some months in advance, had caused a careful study of State school law.

The Institute session was, upon the whole, an interesting and profitable one. Under such able Instructors as Professor Syle and Superintendent Monroe, it could not well have been otherwise.

Total cost of Institute was \$140.

Public education in Marin is increasing in popular favor with each succeeding year. This growing confidence in the public schools keeps pace with the schools themselves as they grow in efficiency. That the Primary and Grammar Schools of this county have attained a high standard of excellence is attested on all sides, but perhaps is best shown by the rank Marin graduates have taken in higher institutions of learning outside the county.

Marin has but one High School—that at San Rafael. This High School has been in existence but two years, yet it has already become well established in public favor. Our pupils are no longer necessitated to leave their county to obtain High School privileges, since the school at San Rafael admits all graduates from Grammar Schools free of charge. Although financially supported by a single district, the High School at San Rafael is, in a certain way, a county High School. I would recommend such legislation as would lead to the establishment of county High Schools at the county seats of certain classes of counties of the State.

A county system of examinations for promotion and graduation has been in use now for three years in Marin, and has done much toward unifying the county schools and systematizing their work. The advantages of such a system are many and important. I earnestly recommend such a system to counties not already having one.

Would recommend the first Saturday in June as the time for holding annual election of School Trustees. The present arrangement interferes with school, and is not at all satisfactory to the people of this county.

MARIPOSA.

Mrs. W. D. EGENHOFF, County Superintendent.

The Teachers' Institute of Mariposa County convened at Mariposa December 17, 1889, and remained in session three days, presided over by Mrs. W. D. Egenhoff, County Superintendent. Twenty-three teachers present: Prof. C. H. McGrew, Institute Conductor; subjects of lectures, "The New Education" and "Children of Crime." Amount of money expended, \$120. Interest, good.

The public schools of this county are in as prosperous a condition as can be expected. The daily attendance should be better, but is, I believe, up to the average. If the schools could be kept open for at least eight months in the year, much better results would appear. The school houses are, as a rule, more comfortable than ever before.

MENDOCINO.

W. K. DILLINGHAM, County Superintendent.

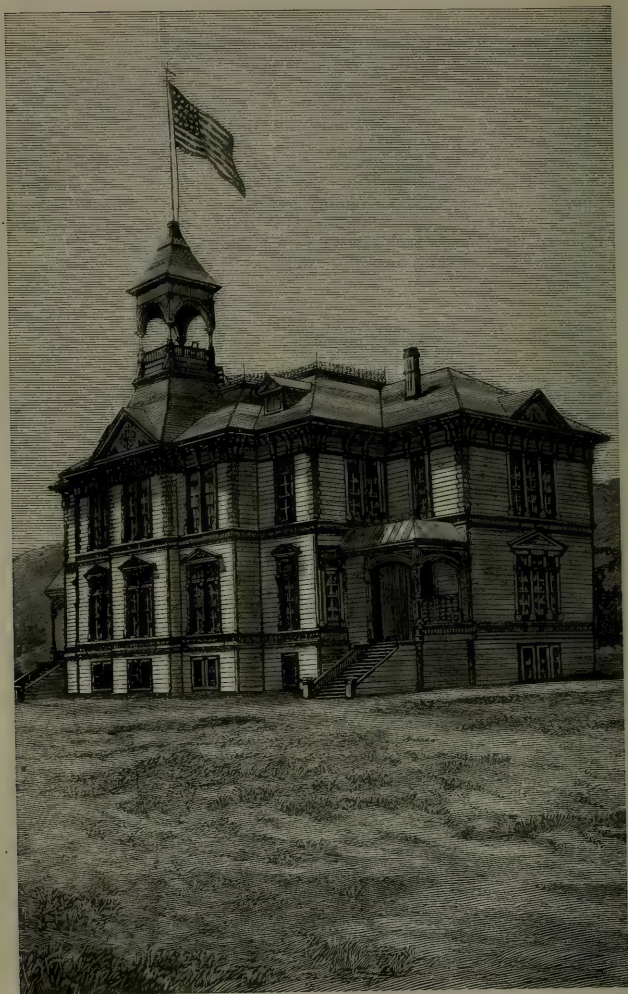
Our annual Institute was held in Ukiah this year June tenth to thirteenth, inclusive. We had a fine attendance. State Superintendent Hoitt was with us, and gave us most excellent aid. Jas. G. Kennedy, of the Cogswell Polytechnic School, San Francisco, worked with us throughout the session, bringing good common sense to bear in all his work. Rev. H. G. Connell, of Santa Ana, was with us during the greater part of the session, taking part in our discussions, and delivering two splendid evening lectures, one of which was a most masterly effort.

The people of Ukiah vied with each other in doing all they could to make the teachers happy and the Institute a success.

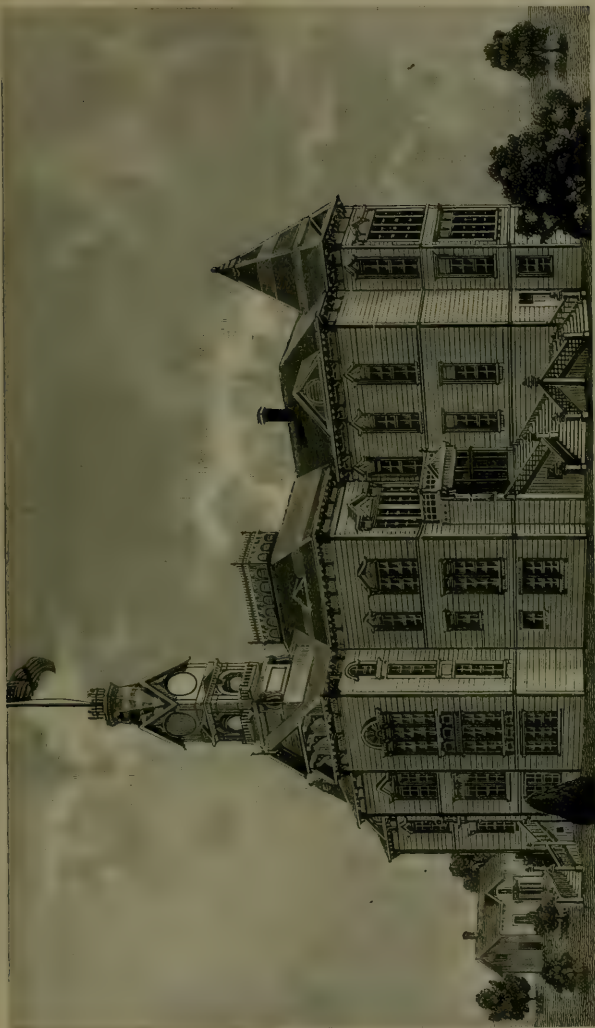
The teachers deserve the highest commendation for their hearty, earnest coöperation in the work of the session.

The schools of the county are certainly improving. This is owing largely to the efforts of the teachers, who seem each year to become more thoroughly imbued with a spirit of earnestness and enthusiasm in their work. I attribute this advancement on the part of the teachers to several causes. Among others, the increased amount of school money (State and county) has enabled the districts to pay better salaries, and thereby holding our best teachers in the county, and bringing a high grade of teachers from other counties. State Superintendent Hoitt has done much by his hearty enthusiasm at our Institutes. Professor McGrew gave us progressive theories last year, and Prof. J. G. Kennedy gave us practical talks this year. Rev. Connell impressed us with a higher respect for ourselves and our calling, and gave us a keener sense of our great responsibility.

The people of the county are coming more in harmony with the teachers and their work. Changes are not nearly so frequent as they were. Young teachers are preparing for admission to the Normal School or the University, and many of them are now in attendance at those schools. The educational outlook for Mendocino County is certainly good.



PUBLIC SCHOOL, UKIAH, MENDOCINO COUNTY.



PUBLIC SCHOOL, EUREKA, HUMBOLDT COUNTY.

MERCED.

JOSEPH A. NORVELL, County Superintendent.

The annual session of the Teachers' Institute of Merced County was held in the Merced Public School Building at Merced, December 17, 18, and 19, 1889. County Superintendent Joseph A. Norvell presided, and Prof. Joseph O'Connor, of San Francisco, acted as Institute Conductor.



PUBLIC SCHOOL, MERCED, MERCED COUNTY.

Forty-six teachers answered to roll call. State Superintendent Ira G. Hoitt was present the first day, and entertained the members of the Institute for several hours upon educational matters. He reported the public schools of the Golden State in a very prosperous and flourishing condition. Mr. Hoitt called the attention of the teachers to the fact that a corporation had been formed for the purpose of raising sufficient funds to erect an edifice of learning, to be controlled by the teachers of the State, stating that such an institution would prove of incalculable value in aiding teachers and giving prestige to educational circles.

At the close of the Institute the following resolution was read and adopted:

WHEREAS, A company has been incorporated to erect a suitable building in San Francisco for the use and comfort of the State Teachers' Association; and whereas, we consider the investment in the stock of said corporation as safe and desirable, financially; therefore, be it

Resolved, That the teachers of Merced County should signify their approval by subscribing liberally for the stock of said incorporation.

The Institute was very interesting and entertaining throughout, and was said by the teachers to have been a grand success.

During the school year ending June 30, 1890, the educational interest of the county has made excellent progress, and notwithstanding the extremely wet winter and the bad condition of the roads, the average daily attendance has been but a trifle less than the preceding year.

The School Trustees throughout the county have taken more than ordinary interest in the schools of their respective districts, and with the ample school funds furnished them, they have been able to run 75 per cent of the schools eight months and over, and 25 per cent of them more than six months. This I consider doing well for the rural districts.

The schools of the county, with but a few exceptions, have been furnished with everything that is necessary for the work and comfort of teachers and pupils.

During the year three new school districts were formed, and in Anna Dunn District, the home of the Holland colonists, the Trustees are going to build a \$5,000 school house at once.

I observed in my official visits that much interest was manifested by teachers and pupils in keeping their school-rooms in a neat and orderly condition, and I have never failed to show my appreciation of such interest and manifestation on the part of the teachers and pupils.

MODOC.

ALICE WELCH, County Superintendent.

The Teachers' Institute of Modoc County convened at Cedarville October 29th and continued in session four days. All the teachers in the county were present but two, and those two were ill.

Prof. Charles H. Allen was present as Institute Conductor, and did valuable work throughout the session.

The people of Cedarville took a great interest in the Institute work, and nearly all attended the lectures.

The Institute was conducted at an expense of \$104 70.

Upon the whole, the schools of this county are certainly in a satisfactory condition.

The majority of our teachers hold Grammar Grade certificates, and most of those holding Primary certificates will avail themselves of the first opportunity to advance in the profession.

An unusual interest is manifested by parents, and they are taxing themselves to build new school houses and maintain eight months schools.

MONO.

CLAY HAMPTON, County Superintendent.

The schools of Mono County have accomplished a great amount of work, though we have experienced a very severe winter.

The school houses are all in excellent condition, and well equipped with improved styles of furniture.

Each district has maintained an eight months term, with a single exception, and were greatly assisted by the transfer of \$2,228 07 to the School Fund by the Supervisors.

One of the best buildings in Bodie District was destroyed by fire, though most of the furniture and library books were saved. Within two weeks, however, the Trustees purchased a two-story building, renovated it completely, and had school reopened with a full attendance.

MONTEREY.

JOB WOOD, JR., County Superintendent.

On October 1, 1889, the Teachers' Institute of Monterey County met at Bagby's Opera House, in the city of Monterey, and continued in session four days.

One hundred and seven of the one hundred and nine teachers employed in the county were present, Mr. Allen McLean and Miss Arabella Thompson being absent on account of sickness.

Prof. Chas. H. Allen, assisted by Professor Worcester and the County Superintendent, conducted the Institute.

The class was divided into sections A and B, presided over by leading teachers selected for the purpose. The expense of the Institute was \$126 90.

Being the first Institute in the city of Monterey for many years, the citizens spared no pains in making the teachers welcome.

The first (Monday) evening was spent in organizing; the second in a very pleasant social reunion; the third in listening to a very interesting lecture, "The Make-up of a Daily Paper," by Hon. T. J. Vivian, of the San Francisco "Chronicle;" and the fourth in listening to "The Boys and Girls of To-day the Men and Women of the Future," by Professor Allen, and "The Volcanoes of Hawaii," by Mr. Vivian.

The teachers, one and all, were very enthusiastic, and gave close attention to the work before them. The time given to each subject was too short, and all felt that we had scarcely begun to discuss the work of teaching, when the Institute must close.

The unanimous verdict, "the best Institute we have ever held," received a hearty response from the County Superintendent.

The schools of Monterey County are progressing in a very satisfactory manner.

During the past year four new districts have been organized. Pacific Grove, Monterey, Salinas City, and Santa Rita have added one teacher each, making the number of teachers employed in the county one hundred and fifteen for the coming term, an increase of six in a year, and thirty-three in four years.

One district (Del Monte) held a two weeks school, being organized in

May; six districts held less than an eight months school, while seventy-eight districts held an eight months school or more, the average for the county being eight and one eighth months.

The plan of examination of the schools by the County Board, introduced during the past year, promises excellent results.

The special reports, by which the work of any pupil in the county is recorded in the office of the County Superintendent and from there in a printed form is sent to every school in the county, insure system and enable teachers to place pupils who are moving from one school in the county to another, in the class to which they belong.

The teachers are more energetic than in the past, and are trying earnestly to follow the course of study and to make the schools a unit in educational work. Many of the school buildings have been greatly improved, and the grounds show that Arbor Day is a popular day, and one which promises good results in the future.

Monterey County boasts of thirteen schools over which the "Flag of Our Country" floats.

NAPA.

F. G. HUSKEY, County Superintendent.

The Napa County Teachers' Institute met in regular session at Central School House, in Napa, October 28, 1889, and continued in session four days.

State Superintendent Ira G. Hoitt was in attendance a part of the time, and lectures were delivered as follows:

Tuesday evening, October twenty-ninth, at Opera House, Mrs. Florence Williams; subject, "Olympic Games of the Greeks." Wednesday evening, October thirtieth, at Opera House, Dr. A. E. Winship lectured to a crowded house on "Sense and Nonsense of Success."

With one or two exceptions, all the teachers of the county were present, and much interest was manifested.

Upon the whole, I consider this Institute one of the most pleasant and instructive ever held in the county.

The actual expense of the Institute was \$197 20.

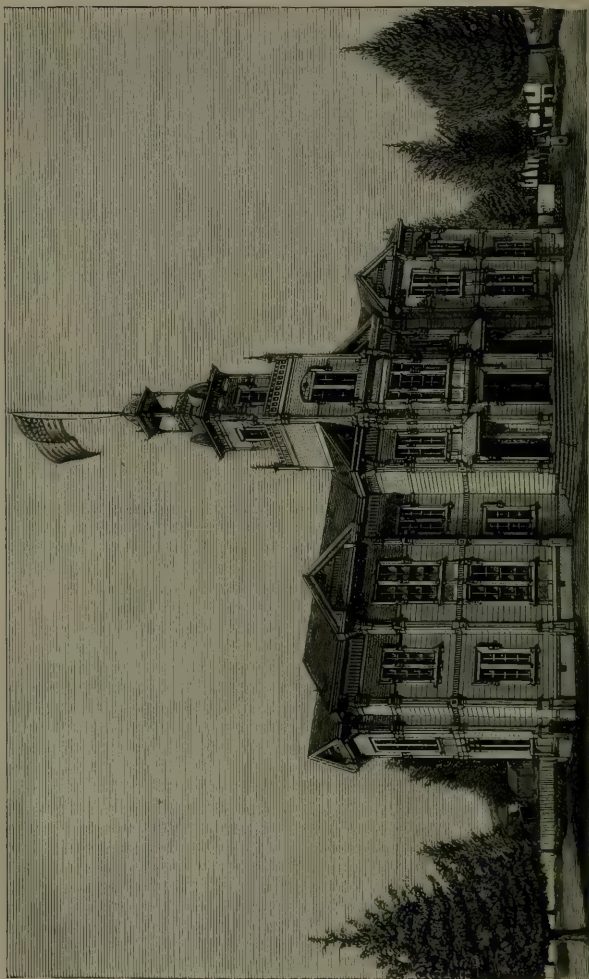
The schools of Napa County are in excellent condition, and compare favorably with those of any other county in the State. There are many evidences of material progress during the year just past. Our teachers are, as a rule, modern in their methods, enthusiastic in their work, and conscientious in the discharge of duty.

The number of Normal School graduates is constantly increasing, and this, of itself, I regard as an evidence of progress.

The number of census children has increased considerably during the year, though no new school districts have been organized.

Our Board of Supervisors is composed of men of good sense and judgment, who are fully alive to the importance of education, and owing to their liberal actions with regard to the school tax levy, our schools are in a healthy financial condition. I hope to see them continue so.

As to adding anything to our present school law, I have but a word of advice to give: Don't.



PUBLIC SCHOOL, NAPA, NAPA COUNTY.

NEVADA.

A. J. TIFFANY, County Superintendent.

The Teachers' Institute of Nevada County was held at Nevada City commencing Monday, April seventh, and closing Friday, April eleventh.

Prof. P. A. Garin, of Oakland, and L. D. P. Syle and wife were present, and assisted in the work of the Institute.

L. D. P. Syle lectured two evenings. His subjects were: "Travels in Europe," and "How We Are Governed."

One hundred and forty-three dollars were drawn from the Unapportioned and the Institute Funds.

The interest manifested was good.

The public schools of Nevada County are in good condition, and are working up to more efficiency each year.

Our country schools were graded last year, and Grammar School examinations were held for the first time this year.

Examinations for Grammar School diplomas were held at four central points in the county on June twentieth and twenty-first. There were thirty-eight applicants, twenty-four of whom were successful. Those who received diplomas were very proud of them. Next year there will be a great many more fitted to pass the examination.

We insist upon the work, as laid down in the manual, being carried out in the main. I regard the graded system, and the granting of Grammar School diplomas to those who faithfully finish the grammar course, as being the most successful move toward elevating the common schools that has been adopted in a number of years.

This system will have a decided effect in showing to Trustees, as well as to the people generally, that there is a difference in teachers, and teachers who cannot produce results will be obliged to vacate. "Practical Results" is being written over every school house door.

Truckee School District has suffered greatly this year from fire. Their beautiful new \$6,000 school house was burned last November, after having school in it only five weeks. The people, however, were not discouraged, but voted additional bonds, and will have their new building ready to open school in by September first.

Grass Valley has shown a spirit of enterprise, and voted \$20,000 bonds with which to erect an eight-room building. It is hoped that the building will be completed, ready for occupancy, by the first of October.

Many of the school houses suffered from the effect of the unusual snowfall of last winter. Hence, the current expenses of the school districts were greater than usual.

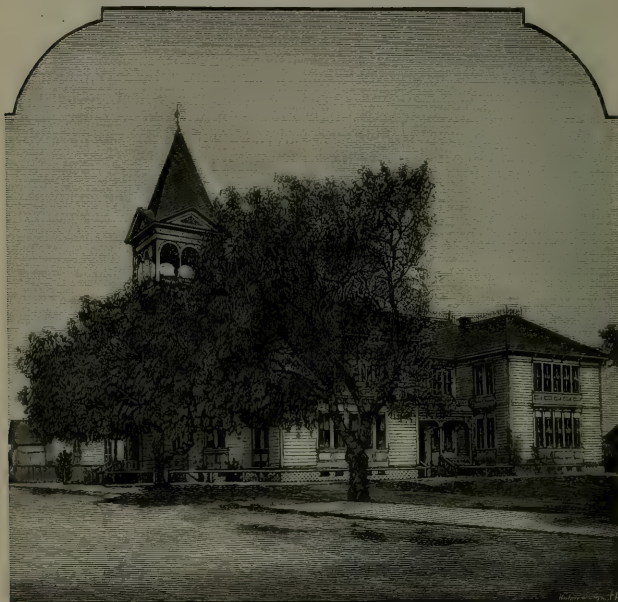
The teachers have been zealous in their work, and the Trustees generally have seconded the teachers in their labors to advance the interests of the schools.

I am glad, upon the whole, to report steady and permanent progress in the public schools of Nevada County.

ORANGE.

J. P. GREELY, County Superintendent.

The first annual session of the Teachers' Institute of Orange County convened in Santa Ana on Monday, March twenty-fourth, and continued in session five days, conducted by the County Superintendent. Sixty-nine teachers, the entire number engaged in the public schools of the county, were present. Much interest was taken throughout the Institute by all present. This was largely due to the earnest work of State Superintendent Ira G. Hoitt, Prof. Charles H. Allen, and Prof. John Dickenson. The teachers manifested more than an ordinary degree of interest, each determined to make our first Institute a success.



PUBLIC SCHOOL, SANTA ANA, ORANGE COUNTY.

During the evening sessions lectures were delivered by Hon. Ira G. Hoitt, Prof. Charles H. Allen, Prof. John Dickenson, and Prof. M. Manley.

At the close of the Institute an Orange County Teachers' Association was formed. Regular monthly meetings have since been held, and much interest manifested in the work.

We look forward to see much good accomplished by these meetings.

The teachers and school officers of this section of the State are of the

opinion that more effective work could be accomplished at Institutes if our State would provide for regular Institute instructors.

It is very gratifying to report the prosperous condition of the schools of Orange County. Coming under our superintendency on the fifth of August, 1889, from territory formerly occupied by Los Angeles County, the schools, some of them in session at that time, were occupied by instructors of more than average ability, nearly 68 per cent of whom are graduates of State Normal Schools, and over 60 per cent are retained in the same position during the coming year. The schools are in excellent condition, the teachers earnest and enthusiastic, doing their best to advance the educational interests of our county. Our teachers' library, though small, consisting of some sixty volumes of professional works, has been in constant demand by our teachers.

Two districts have been organized during the year; four have voted bonds for building, and will erect commodious school buildings the coming season. An \$8,000 building has been erected in Fullerton; a \$5,500 ward building in Santa Ana, and Niguel School District has just completed a \$1,100 building. Some difficulty is experienced in obtaining reports from school officers in time for making annual report.

PLACER.

R. F. BURNS, County Superintendent.

Placer County Teachers' Institute was held at Auburn Monday, November 4th, to Friday, November 8th, inclusive. Dr. A. E. Winship, of Boston, and State Superintendent Hoitt were present. Sixty-seven out of sixty-nine teachers were present during the whole session. One of the absentees was sick with typhoid fever; the other teacher had concluded the school term three weeks beforehand and had left the county.

Never before in the history of Placer Institutes was so much interest manifested by teachers and patrons of schools. During the entire session there was not seating capacity for all the visitors who desired to listen to the proceedings. Each roll call was responded to by the teachers with quotations from American authors.

"Patriotism," class exercises in reading, memory gems, number work, phonics, and Longfellow selections; national songs by the pupils of the several divisions of the Auburn schools; reading, "Dream of an Orthoepist," by teachers; form and color exercises, patriotic historical queries, orthographic parsing, etc., were some of the leading features of the varied program.

Dr. Winship captivated all who had the pleasure of hearing him. "The Boy We Teach," "Patriotism," "Hints for Teaching Arithmetic," "Hints for Teaching History," "How to Think and Remember," and "Stand on Your Own Feet," were presented by him in a masterly manner. His two evening lectures, "Sense and Nonsense," and "Personality," were intellectual treats. On both evenings the Congregational Church was filled to overflowing; every available spot was occupied; the doorway and hallway for two hours on each occasion were crowded.

State Superintendent Hoitt threw earnestness and enthusiasm into all he said and did. He took an active part in all the proceedings.



PUBLIC SCHOOL, NEWCASTLE, PLACER COUNTY.

His remarks on the duties and responsibilities of teachers, and his earnest, suggestive words on patriotism, were frequently applauded.

On the afternoon of the second day's session a large audience assembled to hear his lecture on "Character Building," which was replete with eloquent sentiments and good suggestions.

On Tuesday evening a public reception was tendered Dr. Winship and Superintendent Hoitt, at the Putnam Hotel. The prominent citizens of Auburn turned out en masse. Music was furnished by the Auburn Brass Band.

EXPENSES.

Dr. Winship's services, including board bill	\$64 00
Printing	25 00
Books and Kindergarten material	14 65
Janitor's services	6 00
Total	\$109 65

It is with pleasure that I refer to the present condition of the public schools of this county. When I entered office in 1887, nearly every school district was more or less financially embarrassed. The largest schools did not receive money enough to enable them to maintain a seven months term. Year after year the Board of Supervisors has generously responded to my calls for more money. Each year the School Fund has been increased. Now each district is out of debt, and the smallest school in the county—one having only fourteen census children, with an average daily attendance of only six pupils—received for this school year, exclusive of library money, \$556 85. Each district received sufficient money to maintain a nine months term, and many of them took the greatest possible advantage of the educational feast afforded by a well-filled treasury.

The exceedingly severe winter, however, caused nearly all the schools in the mountainous districts to close, forcing upon them long vacations, and thus preventing them from having the desired length of term.

Two school houses were entirely destroyed by fire. As both of them were old buildings, the loss was not severe. The necessary steps have been taken to erect commodious, attractive structures in their place.

Two years ago a system of examination on questions prepared by the County Board of Education was introduced into the schools. Pupils are now classified and graded according to their work at the annual examination. Printed catalogues, containing a complete classification of all the pupils who were examined, are issued at the beginning of every school year, and a copy is forwarded to each school in the county.

At the end of the term blank certificates, furnished by the Board of Education, are issued by the teachers to pupils in the lowest primary divisions.

Every teacher, on assuming charge of a school, now finds a complete system of classification at his disposal, which enables him to immediately begin work systematically and intelligently.

For the first time in this county, diplomas of graduation were issued to pupils who had completed a prescribed course of study, and who had been regularly promoted from one division to another on official examination.

There were twelve grammar graduates this year. By the close of the ensuing school year there will be at least forty.

The school work this year was unusually proficient. Neatness,

method, thoroughness, and accuracy were the prominent characteristics. It is our misfortune to have three or four teachers who have not only mistaken their calling in life, but are absolutely fossilized. With these few notable exceptions, all the teachers have exhibited ability, diligence, interest, and, in fact, enthusiasm in their work.

The spirit of progression is abroad in our county. Thirty-four, or practically 50 per cent, of our teachers are State Normal School graduates. Ninety-two per cent of the remainder hold life or educational diplomas. The eight teachers holding Primary Grade certificates have exhibited earnestness, and so prepared themselves by reading educational journals and books that there are genuine teaching and broad progression in all their work and aims.

Sixty-two out of sixty-nine teachers subscribe for educational journals.

Unusual interest has been taken in school-room decorations. Steel engravings, lithographs, and India paper impressions of our statesmen, poets, and generals, maps drawn by pupils, and original patriotic designs ornament the walls of many school-rooms. Several teachers encouraged their pupils to gather specimens in natural history and arrange their collections in cabinets. In schools where decorations are made prominent, there is an unconscious disciplinary power exerted. Pupils take a pride in their school. They are more particular in regard to their own personal appearance. In short, they show more respect for school property and seem to obey the rules of school with more than usual willingness.

Arbor Day was celebrated in one district. This fall several districts will be prepared to set out ornamental trees and shrubs.

In several schools the birthdays of many of our celebrated statesmen and poets were observed with appropriate exercises.

Decoration Day was not forgotten. Auburn, Lincoln, Iowa Hill, Colfax, Todd's Valley, and Damascus schools inaugurated the first regular observance of that occasion in this county.

Twenty-seven districts raised the American flag over their school houses for the first time. The occasion was celebrated in each instance with public exercises, consisting of speeches, national songs, flag drills, and patriotic recitations. Before the beginning of another calendar year I expect to see our national emblem floating from the top of every public educational structure in this county. The American flag, or a large picture of it, now hangs in every school-room.

I have had the kindly spirit and hearty coöperation of teachers and Trustees in all my labors.

SACRAMENTO.

B. F. HOWARD, County Superintendent.

The Sacramento County Institute convened in Sacramento City, November 25, 1889, and continued in session three days.

Superintendent Ira G. Hoitt delivered the address of welcome.

Prof. W. S. Monroe, of Pasadena, was present during the entire session, and lectured on the following subjects: "Number and Form," "Reproduction of Stories and Reading Lessons," "What Teachers Should Read,"

"The Child We Teach." Professor Monroe presented many new and original ideas, and his remarks were well received.

Prof. C. C. Stratton, of Mills Seminary, lectured on "Our Times and Their Needs." Prof. Paul Garin addressed the Institute on the subject of drawing.

One hundred and sixty-seven teachers were in attendance, and six were excused "on account of sickness."

The amount of money expended was \$256 80.

Much interest was manifested during the entire session of the Institute, and let us hope great and lasting benefit derived.

Notwithstanding the severity of the past winter, the schools of Sacramento County have made highly satisfactory progress.

The system of annual examination, inaugurated by the County Board of Education for the promotion and graduation of the pupils of the public schools of the county, has been productive of the very best results. Under this system the schools have become more thoroughly classified and graded, and the standard of proficiency has been raised. Owing to a change in the course of study during the year, which materially affected the grading, the number of promotions was less than that of the previous year.

March 28, 1890, was named as "Arbor Day." On that day about thirty districts of the county engaged in tree planting. The number of trees planted was about seven hundred and fifty. In each of the number of districts mentioned, appropriate school exercises were held, and much enthusiasm was manifested on the part of the teachers, pupils, and patrons of the districts.

Many of the districts observed "Flag Day." Hereafter it will be our endeavor to observe Arbor Day and Flag Day conjointly.

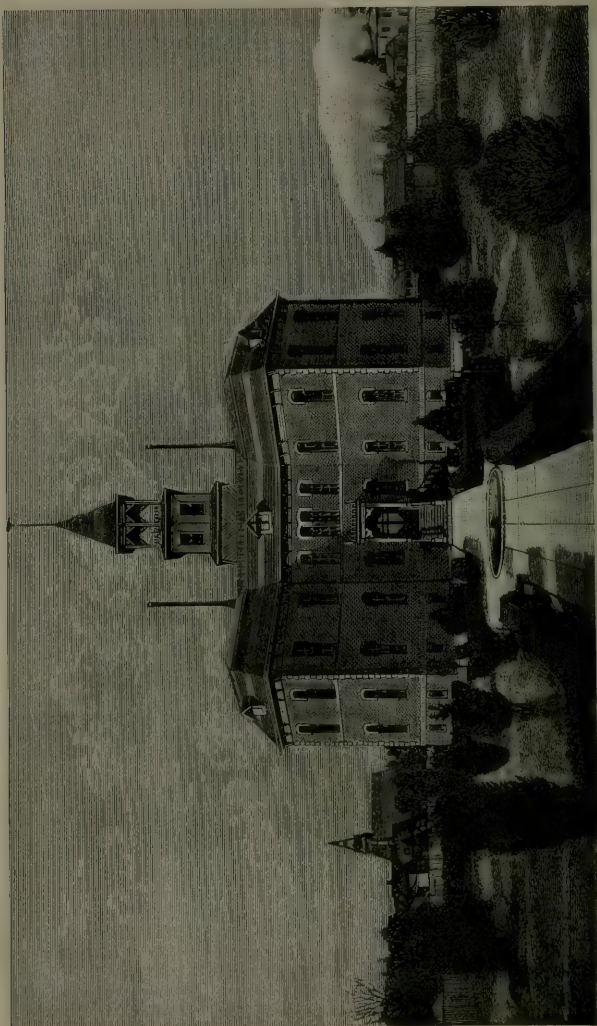
During the year the Orange Vale School District was organized, and a commodious school building is now being erected therein.

SAN BENITO.

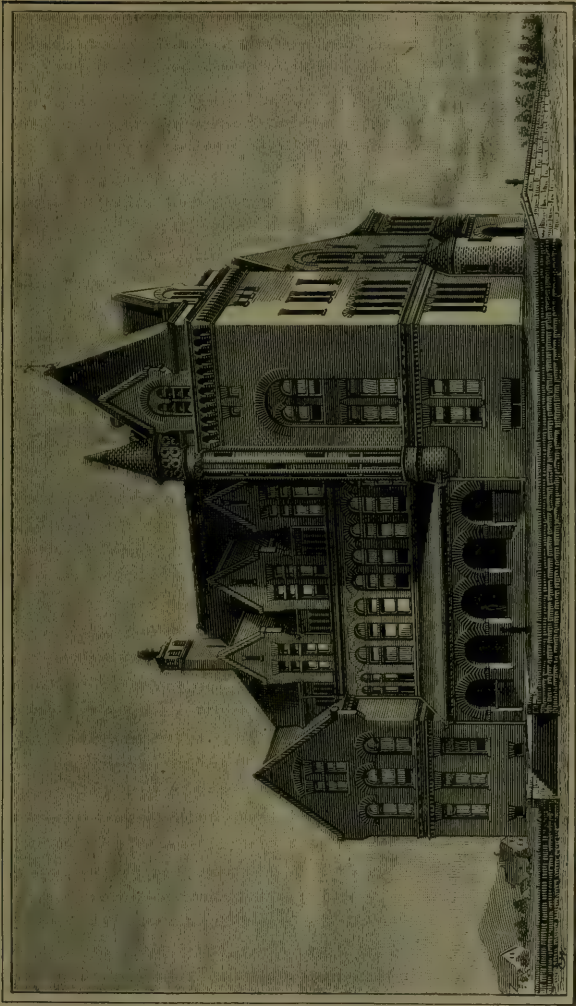
J. N. THOMPSON. County Superintendent.

The Teachers' Institute was held in Hollister, October seventh, eighth, ninth, tenth, and eleventh. Prof. A. L. Mann, of San Francisco, assisted at the Institute, and lectured one evening. The State Superintendent was present part of the time, and assisted very materially to make the Institute a success. The Institute was the best ever held in the county. All the teachers in the county were present, and enthusiasm and good feeling prevailed throughout the entire Institute.

Two school districts, viz.: Quien Sabe and Willow Creek, lapsed at the end of the first term, and the territory was incorporated in adjoining districts; but in May new districts were created out of the same territory, and also given the same name. Although little enthusiasm was shown in these districts, yet the other districts in the county have shown more enterprise than usual. Teachers have been more earnest in their work, and Trustees and parents have taken greater interest than heretofore.



PUBLIC SCHOOL, SAN BERNARDINO, SAN BERNARDINO COUNTY.



HIGH SCHOOL, RIVERSIDE.

SAN BERNARDINO.

H. C. BROOKE, County Superintendent.

As usual, the session of County Teachers' Institute, for school year ending June 30, 1890, was pleasant, interesting, and profitable. Prof. Will S. Monroe conducted the day session, and Prof. John Dickinson lectured before the Institute in the evenings. Every teacher in the county was present and participated in the proceedings.

Cost of Institute, \$100 general expenses, and \$100 for lectures and Conductor.

As this is the final report for the term of four years of the present incumbent of the office of County Superintendent, it might be well to show, by comparative tables, what progress has been made in the School Department of the county of San Bernardino for that period:

	1886.	1890.	Gain.	Per cent Gain.
Census report children between five and seven-teen	4,130	6,397	2,267	55
Attending public school	2,842	4,673	1,831	64
Attending private school	156	239		
Attending no school	1,132	1,485		
Number of classes—teachers	72	118	46	64
Grammar Grade	16	35	19	119
Primary Grade	56	83	27	48
Number of pupils enrolled	2,986	4,916	1,930	64
Grammar Grade	597	1,360	763	127
Primary Grade	2,389	3,556	1,167	
Average daily attendance	1,726	3,261	1,535	
Visits by Superintendent	87	137	50	
Trustees	243	447	204	
Other persons	1,238	2,835	1,697	
Value of buildings, sites, and furniture	\$136,000	\$482,315	\$346,315	254
Libraries	\$8,530	\$12,750	\$4,220	50
Apparatus	\$2,350	\$5,550	\$3,200	136
Total value of school property	\$146,888	\$500,615	\$353,727	240

SAN DIEGO.

R. D. BUTLER, County Superintendent.

The annual session of the Institute was called to begin on Monday, March seventeenth, and then adjourned to Los Angeles to attend the meeting of the State Teachers' Association.

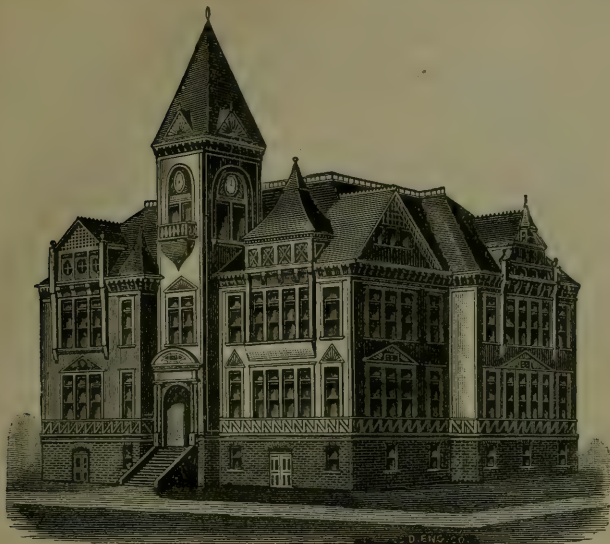
One hundred and fifty teachers attended, the remainder, with four exceptions, being excused for good cause.

There being no lecturers employed by the Institute, the expenses were only \$8 45.

The session was a pleasant and profitable one. By intercourse with leading educators from other parts of the State, our teachers were, in many cases, lifted out of grooves in which they had worked.

As a whole, the schools are in excellent condition. The year has been marked by great activity in providing better houses and furniture, and by a general interest in educational matters.

Want of assistance in the office during the first half of the year, and a severe and protracted attack of "La Grippe" in the latter half, pre-



SHERMAN HEIGHTS PUBLIC SCHOOL, SAN DIEGO.

vented the Superintendent from doing the work of visiting schools. The omissions were absolutely unavoidable.

I think it would be well to amend the law concerning certificates so as to make natural fitness or ability to educate one of the important factors in obtaining a regular certificate. The ability to answer examination questions is not a correct index of the applicant's ability to teach. I would suggest issuing a six months certificate on examination; inspection of work by not less than three members of the Board of Education; and, upon favorable report from this committee, giving a regular certificate.

There should also be definite laws concerning ownership of property and payment of bonded indebtedness in case of division of a district.

SAN FRANCISCO.

J. W. ANDERSON, City and County Superintendent.

In lieu of County Institute, which would have necessitated the closing of all the schools, it was deemed better to hold monthly meetings of the Principals of the several schools.

The schools have been characterized by the usual degree of interest, and are in good condition.

SAN JOAQUIN.

GEORGE GOODELL, County Superintendent.

The San Joaquin County Institute was held at Stockton on November 25, 26, and 27, 1889. The Institute was conducted by Jos. O'Connor, of San Francisco. The number of teachers present was one hundred and twenty-eight.

Jas. G. Kennedy lectured on Wednesday evening, November twenty-seventh, on "Industrial Education." State Superintendent Hoitt attended and gave a very interesting talk to the teachers. The interest manifested by the teachers was very flattering to the Conductor.

The schools of this county are in good condition. The teachers generally show a great interest in their work.

Our Grammar School Course Schools work to perfection, and the people are very proud of them.

The financial condition of all the districts is good—all having balances to their credit.

The Trustees in this county are to be complimented for the interest they manifest in school affairs, and their good judgment in the selection of teachers.

We have had a very severe winter, and several districts have not been able to have six months school on account of floods.

SAN LUIS OBISPO.

W. M. ARMSTRONG, County Superintendent.

The San Luis Obispo County Teachers' Institute for the year 1889 and 1890 was held at Paso Robles on the sixth, seventh, and eighth of May, 1890.

Out of one hundred and twelve teachers engaged in teaching in the county, but three absentees were reported, and these from causes deemed excusable by the County Board of Education.

There were also in attendance Hon. Ira G. Hoitt, Superintendent of Public Instruction, Prof. Charles H. Allen, Julia B. Hoitt, Deputy Superintendent of Public Instruction, and Mrs. Ida M. Blochman, of Santa Barbara.

State Superintendent Hoitt lectured upon the subject of "The Progress of our Schools." Professor Allen addressed the teachers upon "The American Schools." Mrs. Hoitt read an admirable paper on "Recent Educational Discoveries," and Mrs. Blochman explained to the teachers assembled the purpose and proper scope of "Scientific Temperance Instruction in the Public Schools."

The session was enthusiastic and interesting throughout.

The enjoyment of the teachers on the occasion was greatly enhanced by the hospitality and kindness shown them by the people of Paso Robles.

The public schools at San Luis Obispo are, at this time, more prosperous than at any previous period in their history.

The fact is fully convinced by the marked improvement in the character of teachers employed, the growing interest upon the part of Trustees and patrons, the attention received from the press and the public

generally, the steady advance in salaries paid, and the gain in the number of school months taught.

The present report shows a gain of three hundred and thirty-one census children, and a corresponding increase in the average belonging and average daily attendance.

Three new districts have been created, and no less than eight new buildings have been completed, while as many more are in course of construction.

One more has been added to the list of schools in which the Grammar School Course is taught, and the proportion of Grammar Grade Schools will be largely increased.

The County Board of Education has endeavored, by all appropriate means, to elevate the standard of the profession, and have extended every possible encouragement and aid in the building up and promotion of the highest and best interests of the schools.

In no direction has the improvement been more marked than in the selection and use of school library books and apparatus as an aid to intelligent and progressive methods of instruction.

In the main, the public funds have been wisely and economically expended, and our schools enter upon the new year with bright prospects of success.

I would suggest that in Section 1593 of the School Law of 1889, the word "Saturday" be substituted for "Tuesday." With this exception, I shall reserve all suggestions for amendments until the biennial meeting of the Convention of County Superintendents in December next.

SAN MATEO.

J. F. UTTER, County Superintendent.

The Teachers' Institute of San Mateo County was held in Redwood City, commencing April twenty-second, and closing April 24, 1890.

On Tuesday morning the session was opened in the Congregational Church by calling the roll. All the teachers, except one who was sick, employed in the public schools in the county responded with quotations.

After a few appropriate remarks of welcome by Mr. G. P. Hartley, Prof. C. H. Allen, of San José, Conductor of the Institute, began the work.

Professor Allen gave an interesting lecture in the evening on the subject "Memory."

The Institute Wednesday morning was divided into two sections, for primary and advanced school work, each section occupying rooms in the public school building.

In the afternoon the teachers attended the flag-raising exercises of the public school, which consisted of patriotic songs and recitations by the pupils and friends of the school, and short addresses were made by Prof. C. H. Allen, Hon. I. G. Hoitt, Col. Harkins, of Menlo Park, Superintendent Fisher, of Alameda County, and Superintendent J. F. Utter, of San Mateo.

After the exercises the teachers met in the Congregational Church, and were addressed by State Superintendent I. G. Hoitt and P. M. Fisher on practical discipline in our schools.

In the evening Dr. A. C. Hirst, of the University of the Pacific, delivered a scholarly lecture on the "Force That Wins."

During Thursday Professor Allen was assisted by Prof. G. R. Kleeberger, of the State Normal School of San José, who conducted the work of one section in the forenoon, and lectured to the teachers in the afternoon on the "Desirability and Practicability of Manual Training in the Public Schools."

The expenses of the Institute session amounted to \$119 75.

The Institute closed Thursday afternoon, after an interesting and instructive session of three days.

In looking over the work of the year just passed, I am led to believe that the schools of this county were never in charge of a more earnest and efficient corps of teachers than at the present time.

There is a growing sentiment among the patrons to furnish better school facilities, to increase the wages of teachers, and to demand more efficient school work.

The Belmont District voted a special tax of \$5,000, and erected a commodious house of four rooms. Montara District built a convenient house of one room for \$900. A special tax of \$3,000 was voted in Millbrae District, with which a house of two excellent rooms was built. Wurr District voted a tax of \$500 for building purposes. The plans are drawn for a new building. On account of the increasing number of children, San Mateo District has employed an additional teacher. Besides the new buildings erected, several of the districts have made extensive improvements on their school property.

The interest manifested on the part of Trustees and teachers in the cause of education during the past year is indicative of better results during the present year.

SANTA BARBARA.

G. E. THURMOND, County Superintendent.

The Teachers' Institute was held at Santa Barbara High School building September thirtieth, and October first, second, and third; called to order by County Superintendent. Holton Webb, of Lompoc, was chosen Vice-President, Miss Laura Breslauer Secretary, and Archer Griffiths Assistant Secretary. Prof. C. H. McGrew was present during the entire session, and gave us some valuable practical ideas on psychology, and especially adapted to the study of child nature. Superintendent C. T. Meredith, of Ventura County, added much to the interest of the Institute by his able talks on practical methods.

The following subjects were discussed in their order: "Scientific Temperance," by Ida M. Blochman; "Language," by Professor Conrad and Santa Barbara teachers; "Conduct of Teachers During Intermissions," by S. A. Winchester; "Modeling in Clay," by Superintendent C. T. Meredith; "Practical Entomology," by Prof. T. N. Snow; "Tricks of the Trade," by E. E. Gardner; "Manual Training," by Chas. G. Meeker.

The poem by S. A. Holman, "As Others See Us," and a paper on "Language," by Professor Conrad, were well received and were ordered published. The exhibit of school-room work was most creditable, and was afterwards shown in the Pavilion at the County Fair. The reception at the San Marcos Hotel, tendered by the teachers of Santa Barbara and

vicinity to visiting teachers, was a most enjoyable affair. The evening lectures at Y. M. C. A. Hall were well attended and thoroughly appreciated. Expenses, \$160. All teachers employed in the county, with the exception of three, excused on account of sickness, were present.

During the past year the schools of this county have steadily advanced, much of which is due to the exhibit of school work at the Institute. Two districts have adopted the Grammar School Course—Carpenteria and Central. Only two pupils graduated from that course, although the list graduating from the Grammar Grade is increasing every year. A most gratifying interest in the building and furnishing of school houses is noticed. Santa Barbara County has been one of the foremost in flag raising. Most of the districts are now supplied with handsome flags, which were mainly purchased by the pupils, thus instilling in them patriotism and a love of country.

SANTA CLARA.

L. J. CHIPMAN, County Superintendent.

The Santa Clara County Teachers' Institute, for the school year ending June 30, 1889, was held in the High School building at the city of San José.

The Institute convened on Monday, November twenty-fifth, and continued three days, County Superintendent Chipman presiding.

The enrollment was one hundred and eighty-seven.

On Tuesday evening, Rev. F. F. Jewell delivered a very interesting lecture on "Education."

The county teachers were assisted in the Institute by Prof. C. W. Childs, Mrs. Willson, and Miss Schallenberger of the State Normal School.

State Superintendent Hoitt was present and addressed the Institute, speaking particularly of the improvement of the schools throughout the State. The Institute was a decided success.

The teachers and Trustees appear to be well satisfied with the school law as amended at the last session of the Legislature.

The schools are in a very satisfactory condition, and the teachers working faithfully to advance the educational interests of the county.

Trustees and patrons have manifested an increased interest in the schools, as is conclusively shown by the fact that the Trustees made three hundred and three, and patrons and others one thousand seven hundred and twenty-four more visits than during the previous year.

But two districts have failed to maintain school eight months, and seventeen districts have maintained school for ten months.

SANTA CRUZ.

J. W. LINSBOTT, County Superintendent.

On account of the State Teachers' Association being held at about the time for our Institute, it was thought best to postpone our meeting until the fall term.

It is with pleasure that I report the schools of the county in a prosperous condition. A large proportion of the teachers of this county are experienced instructors, and being progressive, better work has been done than ever before.

Our people evince great interest in the schools, shown by their willingness to vote money for their support, the pride they take in improving school property, and their appreciation of the work of faithful teachers.

During the past year a fine four-room building has been erected at Soquel, at a cost of \$8,000; a very neat one-room building at Hazel Brook, besides other improvements in other parts of the county.

Thanks to the action of the last Legislature, my successor in office will be enabled to devote his entire time to the schools. With ninety-eight teachers in the county, one can readily see how unsatisfactory is the work a Superintendent can do when he is employed in teaching during the year.

SHASTA.

ELIZA WELSH, County Superintendent.

Shasta County has had one Teachers' Institute during the past year, which, notwithstanding the very inclement weather, was well attended, there being more than one hundred teachers present.

We had the pleasure of Prof. L. Du Pont Syle's able assistance, and feel that we cannot speak too highly of him as an Institute Conductor. Professor Stratton delivered one lecture, and delighted a large audience.

Our session was a week, instead of three days. This seemed to please all concerned. We had fewer "papers" and more class exercises than formerly.

Only two teachers, living or teaching south of the snow-covered mountains, were absent, and those two, refusing (though they passed through Redding en route to Sacramento during the Institute) to give any reason for four days' absence, had their certificates revoked by the Board of Education in June. This we considered an extreme measure, but knew of no other way to settle it.

Duration of Institute, from December 16 to 20, 1889, and was held at Redding. It was conducted by L. Du Pont Syle and County Superintendent.

Money expended, \$150.

Lectures were as follows: On December seventeenth, "Our Congressmen," etc., by L. D. P. Syle; December eighteenth, "Our Times and Their Needs," by C. C. Stratton; December nineteenth, "Travels in the Old World," by L. D. P. Syle.

Our schools have done remarkably well, considering the hard winter and numerous changes of teachers. Nearly half the schools in the county have changed teachers during the term, and this is not because teachers refuse to sign contracts, but because Trustees fail to display business tact in this particular. We think it would be very much better (and we suggest this as an amendment to the school law), if the Board of Education, assisted by the County Superintendent (who knows more about the needs and financial conditions of the schools in his or her county than 95 per cent of the Trustees), had the right to elect or appoint teachers for the schools. They could do this instead of making

questions for examination of teachers, while the State Board of Education could compile a set of questions for the entire State at the same time, and in this way secure something like equality in the fitness and requirements of our teachers throughout the State. We know just enough about the "ways and means" of County Boards to know that "they won't do." They are too strict in one county, and expect the applicant to be an encyclopedia; and, in the next county, all that is necessary is to be able to find answers to questions and copy them from the books, or to remember answers to leading questions given by the teacher (who is a member of the Board of Education) within the past month.

We have a district (Lassen) in this county paying from \$84 to \$112 per month salary, and the school is "running" without actual necessities. We are confident that this teacher and a few others bribe Trustees for position. If there is any way to reach this thing with the law, we hope it will be done. We hope and trust the compulsory educational law will be strengthened so as to make it practicable.

SISKIYOU.

C. O. SHARPE, County Superintendent.

The last Institute, held in June, was the most successful one ever held in the county. Prof. W. W. Anderson, of Oakland, was Conductor. There were but few absences, and but one willful absentee, and he was punished by having his certificate revoked.

The schools of the county were never so prosperous. The length of term varies from seven to ten months, and teachers are enthusiastic in their work.

SOLANO.

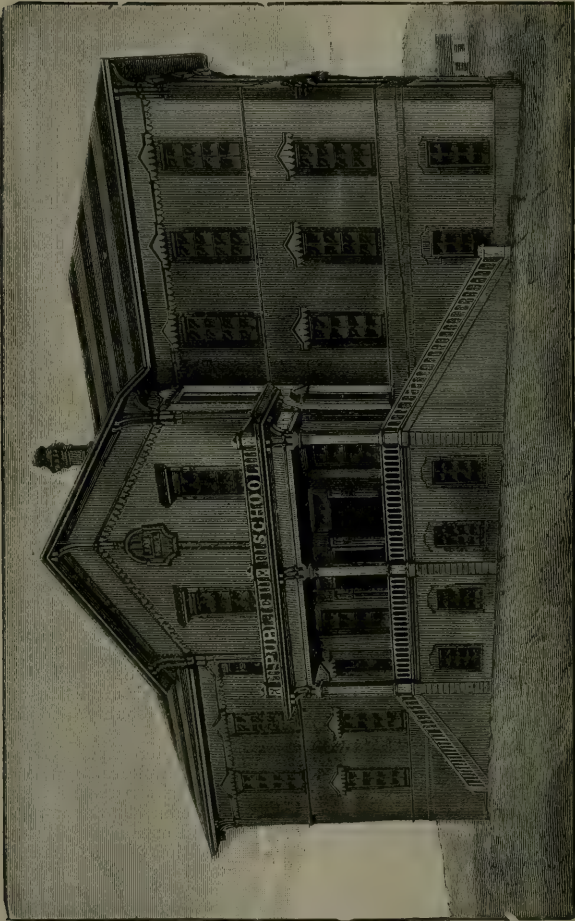
CALVIN B. WEBSTER, County Superintendent.

The twenty-eighth annual session of the Solano County Teachers' Institute was held in Suisun City April 7, 8, 9, 10, and 11, 1890. The Institute was held as a Normal Institute, and was in charge of L. Du P. Syle, C. W. Childs, Principal of the State Normal School at San José, P. M. Fisher, County Superintendent of Alameda County, and Hon. Ira G. Hoitt, Superintendent of Public Instruction.

The Institute proved to be very profitable and interesting. The people, to a unit, used every means to make the week a pleasant one for the teachers. The remarks by Childs, Fisher, and Hoitt were full of good ideas, and created a good deal of enthusiasm in educational matters.

From the unapportioned County School Fund I expended \$100; from the Teachers' Institute Fund, \$42 50. In addition to this I expended some \$80, which I raised from advertisements in the "Daily Institute Bulletin," some four hundred copies of which were distributed daily.

The schools of Solano County have made material progress during the year. There is, however, ample room for growth. Under the excellent supervision of our County Board of Education, the hinderances to



PUBLIC SCHOOL, BENICIA.

advancement are fast being removed. The annual examinations for graduation and for promotion will accomplish much good.

I have exerted my best efforts to keep up wages, as well as to make more secure the teachers' "tenure of office," and feel much elated at my success.

Most of the school property is in good condition. The rooms are well seated and supplied with the latest and best apparatus. The school houses are in good repair, and painted, and trees and plants begin to ornament the grounds, while the Stars and Stripes are visible everywhere.

I would suggest that the school law be so amended as to change the election of Trustees from the first Tuesday to the first Saturday in June.

SONOMA.

MRS. F. MCG. MARTIN, County Superintendent.

The twenty-seventh annual session of the Sonoma County Institute was held in Healdsburg, March 31 to April 4, 1890.

Of the one hundred and ninety-four teachers employed in the county, one hundred and eighty-eight were present; the absences were the result of serious illness either of the absentees or of members of their families.

Prof. Will S. Monroe, Superintendent of the Pasadena Schools, conducted the Institute during the first three days of the session. The subjects taken up by him were: "Managing the School," "The Child We Teach," "Science for Grammar Grades," "Arithmetic and Form," "Beginning Steps in Science," "What Teachers Should Read," "Supplementary Reading," "Morals and Manners," "Literature, Reading, and Thought Getting," "Geography for the Little Ones," "Culture of the Senses," and "Language Teaching."

The instruction given by Professor Monroe was most admirably fitted to the requirements of our teachers and schools, being able, interesting, and practical to the highest degree.

Mrs. Edith Syle was present as a special kindergarten instructor, and made her work very interesting to our primary teachers.

Prof. L. Du P. Syle was present the last two days of the session, and gave valuable instruction upon the following named subjects: "Civil Government and American History," "American History and Primary Schools," "Geography," and "School Government."

A number of our own teachers read papers which evinced deep thought and careful preparation.

Evening lectures were delivered as follows: Tuesday, Prof. Will S. Monroe, "The Law of Relation;" Tuesday, Hon. Ira G. Hoitt, "Progress of Educational Work and the Coming Man;" Wednesday, Dr. A. C. Hirst, "The Force That Wins;" Thursday, Prof. L. Du P. Syle, "Travels in England, France, and Spain."

The Superintendent's annual address was given on Monday evening, and was followed by a most enjoyable reception tendered the visiting teachers by the teachers and citizens of Healdsburg.

The good influence of this Institute is very noticeable in all the schools of the county.

During the past year progress in educational affairs has been marked.

The grading is approximating our course of study more closely from term to term, teachers and pupils showing an equal interest in the matter.

Seventy pupils have received diplomas of graduation from the Grammar Schools of this county during the past year. We find that this matter of graduation is a most important factor in the grading and progress of our schools.

Four new school houses have been built, and many repairs and improvements have been made.

March fourteenth was quite generally observed as School Arbor Day, and the results are very encouraging.

Flags have been raised over a great number of our school houses, and both teachers and parents seem to appreciate the necessity of fostering the sentiment of patriotism in our young people.

Twenty-seven districts have maintained school for nine and ten months this past year, while but seven have had less than eight months of school.

Although the county rate of taxation for school purposes has been reduced 25 per cent during the past three years, our school was maintained on an average 8.31 months, as compared with 8.19 months during the school year of 1886-87.

STANISLAUS.

W. B. HOWARD, M.D., County Superintendent.

The annual Teachers' Institute for 1889 and 1890 was held in Odd Fellows' Hall, Modesto, on November 20, 1889, and continued in session three days.

Each teacher, having been assigned a subject beforehand, came prepared, either with an essay or well thought-out talk, on the subject assigned.

Great interest was manifested by all, and the Institute was considered the most instructive ever held in the county.

State Superintendent Hoitt was present during the session, and cheered the teachers on in their good work.

Each school in the county was represented with the exception of one, Rowe, which was not in session at the time.

SUTTER.

G. B. LYMAN, County Superintendent.

The Teachers' Institute of Sutter County met and organized at the school house in Yuba City, at 10 o'clock A. M., October 16, 1889, and continued in session three days. Prof. C. H. McGrew, of San José, acted as Institute Conductor.

Every teacher in the county (forty-one) was present, and nearly all took an active part in the work. This session was marked by an exceptional degree of enthusiasm in the study of scientific methods of instruction.

Prof. C. H. McGrew lectured Wednesday and Thursday evenings at

the Odd Fellows' Hall, as follows: Subject, Wednesday evening, "History of the New Education;" subject, Thursday evening, "Children of Crime."

Total expense of Institute, \$128.

Our schools have done excellent work during the past year, notwithstanding the inclement weather. Some districts have been flooded, and the roads in some places have been impassable for weeks at a time, hence the enrollment and average attendance have been smaller than during the previous year, but the majority of teachers have succeeded in keeping up a high degree of interest in school work. Fifty-two pupils applied for diplomas of graduation; out of this number, twenty-five were successful. This is the largest number graduated in any one year.

The districts not visited by the Superintendent were cut off by water from the surrounding country, so that it was impossible to reach them by land.

Knights District was covered with water for six months, which accounts for their failure to maintain six months school.

Jefferson District lapsed April eleventh, and consequently does not appear in the census statistics.

TRINITY.

H. R. GIVEN, County Superintendent.

The progress of the schools for the past year has been most encouraging. School officials have coöperated with the teachers in lifting our schools to a higher plane, and their progress has been uniform.

Last June a class of eleven from the Weaverville schools appeared before the Board of Education and obtained diplomas of graduation. The graduating exercises of the class were largely attended, and will do much to increase the interest in educational work.

Our corps of teachers is enthusiastic and energetic, and our mountain schools will stand comparison.

It is gratifying to be able to report that the common schools of Trinity County stand better than ever.

TULARE.

CHAS. H. MURPHY, County Superintendent.

The Teachers' Institute of Tulare County was held at Armory Hall, in Visalia, commencing November 12, 1889, and continuing four days.

The Institute was conducted by the County Superintendent. Of the one hundred and fifty-one teachers actually engaged in the public schools of the county, all were in regular attendance, with one exception. As an indication of the interest manifested, many citizens throughout the county attended the daily sessions, and the evening audiences numbered from one thousand two hundred to one thousand six hundred.

State Superintendent Hoitt favored the first evening audience of the Institute with an able and instructive address upon "What to Do, and How to Do It," which was enthusiastically received.

Prof. C. M. Gayley, of the State University, lectured the second evening upon "Cubes, Marbles, and Men." The address was brilliant with original ideas, ably expressed.

President Jas. G. Kennedy, of the Cogswell College, San Francisco, favored the audience on the third evening with a lecture upon "Industrial Education," which created much enthusiasm and favorable comment with our citizens. A special excursion train was run on that evening and the following one, to accommodate the people who were anxious to hear Professor Kennedy and the Hon. John P. Irish, who addressed the Institute on the last evening. The audience on each occasion exceeded the capacity of Armory Hall. Mr. Irish's address was eloquent and learned, and when the speaker concluded, the applause was deafening. Thus the most successful Institute of the county was terminated. The spirit of enthusiasm, so rife on the first day and evening, culminated in an ovation for all the evening lecturers and Institute workers.

The schools of Tulare County have made commendable progress during the year. The standard of qualification for teachers has been gradually increasing the past few years, and a better quality of work is the result. Many of our teachers have received special training, and as a whole are active, energetic, zealous—doing faithful work.

The financial support received from our county the past year was wholly inadequate to meet the demands, being only forty-seven per cent of the amount received from the State, or one hundred and eleven per cent less than the State funds. As a result, only thirty districts maintained an eight months school, and the average length of the term was less than seven months.

There is a strong public sentiment for better support, as is evidenced by the laudable enterprise in voting special taxes to extend school facilities and bonds to build costly and substantial school edifices.

During the year, Porterville and Dinuba Districts built handsome brick school houses, at a cost of \$12,000 each. Armona and Lindsay Districts are now building substantial brick houses, at an expense of \$10,000 each, and the city of Visalia a three-story structure, a model of architectural beauty, comfort, and convenience, at a cost of \$30,000.

With but few exceptions, our school houses are creditable and comfortable, and well supplied with good furniture, libraries, apparatus, and other labor-saving appliances. The condition of our public schools is satisfactory, and sustained by an enlightened public sentiment, as is shown by the increased interest in school work, visitations, and the numerous taxes for their support.

Relative to suggestions for needed amendments to the school law, I would most earnestly recommend:

First—Some legislation to settle the much vexed questions of territory adjoining and attached to incorporated cities.

Second—That a High School be established by a vote of the county, and supported by the same.

Third—That the annual election for School Trustees be held in March or April.

Fourth—That the County Board of Education be appointed by the County School Superintendent, subject to the ratification of the Board of Supervisors.

Fifth—That provisions be made by the State to procure, copyright, and publish plans and specifications of school houses, for use of School Trustees.

Sixth—That a law explaining and defining the duties of School Trustees, in regard to building school houses, be embodied in the school law.

TUOLUMNE.

G. P. MORGAN, County Superintendent.

The second Institute held in Tuolumne County convened at Sonora, the county seat, on May 20, 1889, and continued for three days. Prof. C. H. Allen, of San José, was present in the capacity of Conductor; State Superintendent Hoitt arriving on the evening of the twentieth, and remaining during the day and evening of the twenty-first.

Thirty-three out of thirty-six teachers were present, some of whom conducted class exercises, others read papers pertaining to the studies taught in public schools, or to the profession of teaching.

Professor Allen lectured during the day on methods of teaching different subjects, and on Tuesday evening talked to a large audience on the subject of public schools. During the second day, Professor Allen and Superintendent Hoitt spoke upon different topics between the parts of the program allotted to the teachers.

In the evening, at Opera Hall, State Superintendent Hoitt read a lecture, entitled "What to Do, and How to Do It." At the conclusion of his remarks, he spoke for a time upon matters pertaining to education. Both the lecture and the extempore remarks were very highly appreciated. On the evening of the closing day a literary program was rendered, volunteers entertaining the audience with songs, instrumental selections, and recitations. Professor Allen being asked for a few remarks, spoke for half an hour upon the outlook for Tuolumne County, from a fruit-growing standpoint. The Professor was frequently and warmly applauded.

Seventy-five dollars was expended for lecturer's services, and \$31 39 for incidentals.

All through the session deep interest was manifested by the public, both in the program and in the exhibit of work from the different schools of the county.

The Institute was productive of much good, and it is my humble opinion that the work of the schools will be better as a result of these meetings.

The schools of Tuolumne County were never better than at the present time. During the four years visits have been made annually to all of the schools, with four exceptions, and the progress and improvement have been marked. The teachers, pupils, and parents are in harmony, and all work for one purpose, that of making the schools what they should be. The percentage of attendance is small this year. This is due to the unusual severity of last winter's storms. The school buildings are in good condition, nearly all being neatly painted. New and improved furniture is being introduced in many. The libraries, as a general rule, are stocked with well selected books, while all are supplied with maps, charts, and other apparatus. As a result of the interest taken in education at the last Institute, the Trustees of Sonora have issued notices of election for the purpose of voting a \$2,500 tax for increasing school facilities. It seems to us, and it has been brought practically before us, that in elections with reference to locating or changing locations of school houses, the heads of the census children should alone be entitled to vote. In our county this would obviate a deal of difficulty and dissatisfaction.

The Superintendent of Schools of Tuolumne County has not been

allowed any traveling expenses during his term of office, owing to a conflict of some of the sections of the Code. The matter of per diem, as member of the County Board of Education, still is an unsettled question. These points are of minor importance, yet they should be settled one way or another. Aside from these points, the school law will do as it is.

VENTURA.

C. T. MEREDITH, County Superintendent.

Institute convened Monday, December 9, 1889, and continued in session five days. Dr. A. E. Winship, of Boston, acted as Conductor. It was an unusually interesting and profitable session; no report can do it justice.

YOLO.

GEORGE BANKS, County Superintendent.

The Teachers' Institute of Yolo County was conducted by W. H. V. Raymond, who handled the subjects presented by him in a masterly manner. The teachers all expressed themselves as pleased with the work. Miss Bradbury, of San Francisco, illustrated her methods in drawing, which were excellent and instructive. Miss Campbell, also of San Francisco, treated the subject of primary reading very skillfully, emphasizing the benefits of story telling to young pupils. On the whole, our Institute was one of the best that we have had.

YUBA.

F. B. CRANE, County Superintendent.

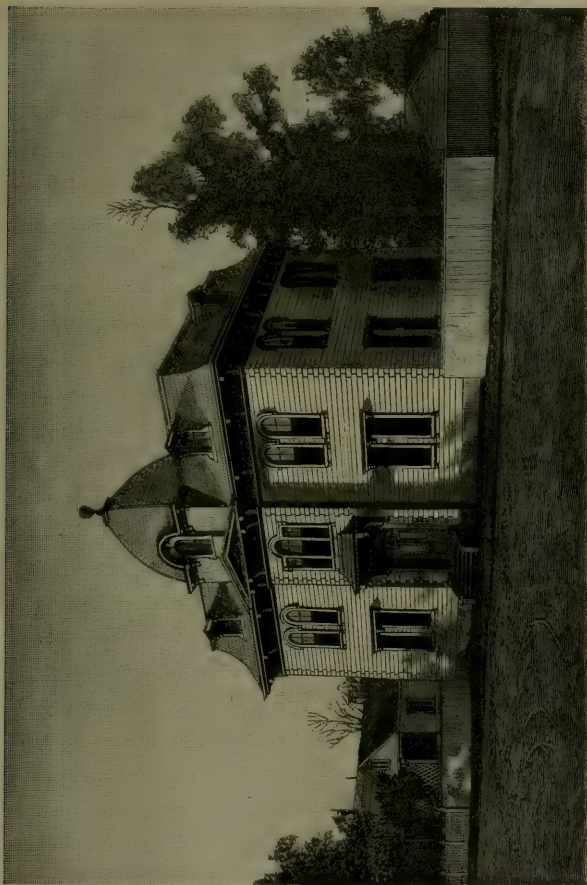
Teachers' Institute was held in Marysville on the following days: October twenty-third, twenty-fourth, and twenty-fifth. There were thirty-seven teachers present during the session. Owing to the severe storm which prevailed previous to and during the session, a number of teachers, living at long distances from the county seat, were unable to attend the Institute at all.

Dr. A. E. Winship, of Boston, Massachusetts, took in charge the class of teachers, acting as Conductor and Instructor during the three days. One evening lecture to the public was given by Dr. Winship; subject, "Sense and Nonsense of Success."

Great interest was manifested in the work during the entire session, and it proved the most beneficial and satisfactory Institute of any that has been heretofore held for many years.

EXPENSES.

Dr. A. E. Winship.....	\$80 00
Hotel bill.....	6 00
Rent of hall.....	7 50
Total.....	\$93 50



HIGH SCHOOL, MARYSVILLE, YUBA COUNTY.

On the twenty-fifth—the last day of the session—Superintendent of Public Instruction Ira G. Hoitt unexpectedly made his appearance at the Institute, and was very pleasantly greeted by those present. He occupied a portion of the time in a brief address upon the duties of teachers and the advantages of thoroughly understanding the law upon which our public school system is based, particularly that portion applying to teachers.

The progress of the public schools of Yuba County during the year just closed has been greatly retarded by excessive and unprecedented storms. The summer schools—those situated in the mountainous regions—from the great depth of snow, were not able to reopen until very late in the spring, too late to maintain school the length of time required by law. Otherwise than being interfered with by continuous storms and impassable highways, the schools have maintained their standing with the preceding years.

The average attendance has been somewhat reduced, from causes above stated, but the enrollment has increased, showing clearly that the severity of the winter season has had a serious effect on the schools.

Taking into consideration the great disadvantages under which the schools of the county have labored, there seems no valid reason for complaining or finding fault. These obstacles in the way of a satisfactory year's work in the field of education, were from natural causes, and could not be avoided, but which, it is hoped, will not recur again.

REPORTS OF CITY SUPERINTENDENTS.

PASADENA.

WILL S. MONROE, City Superintendent.

The past year has been one of unusual prosperity. My predecessor, Mr. Edw. T. Pierce, now Principal of the State Normal School at Chico, left the schools in good condition. No time was, therefore, lost in undoing what had already been done. During the year one thousand four hundred and twenty-seven pupils were enrolled in our schools, with an average daily attendance of one thousand and thirty-six. A number of those enrolled were the children of tourists who spent only a part of the year here, hence the average daily attendance was not what it would have been otherwise. Our percentage of attendance for the year was 93. We had in all three thousand one hundred and twenty cases of tardiness.

Our schools were never better visited than the past year. The Trustees made one hundred and one visits; the Superintendent, five hundred and seventeen visits; the patrons, eight hundred and thirty-nine visits; visits by others, one thousand and one; making a total of two thousand four hundred and fifty-eight visits for the year. We enjoyed also visits from a number of noted educators from abroad. State Superintendent and Mrs. Hoitt visited all our schools, as did a number of others. At a school exposition held in May, over one thousand persons, most of them patrons, inspected the work.

Our monthly City Institute was an important factor in the year's work. These meetings were held on Saturdays, and were always largely attended. Among those who gave instruction at the Institutes were Dr. A. E. Winship, Prof. John Dickinson, Dr. M. M. Bovard, Dr. LeRoy D. Brown, Mrs. Clara A. Burr, Prof. Ira More, Hon. Abbot Kinney, Dr. A. W. Plummer, and Prof. James A. Foshay. We held sixty-six grade meetings during the year.

We have aimed to do progressive educational work. Our work in language, drawing, penmanship, spelling, and modeling has centered about subjects related to elementary science. Our endeavor has been to relate the subjects taught in the schools. In a manner somewhat similar, our supplementary reading has related to the geography, history, and literature.

In many ways the value of our work was increased by courtesies from the efficient State Superintendent, Hon. Ira G. Hoitt, and to him, as well as to Superintendent W. W. Seaman, and the Board of Education of Los Angeles County, I wish to express my thanks for numerous favors throughout the year. The interest, sympathy, and support of Mr. Geo. F. Kernaghan and other members of the City Board contributed materially to the pleasure and success of the year's work.

CITY OF POMONA.

F. A. MOLYNEAUX, City Superintendent.

The Pomona City public schools have an enrollment of seven hundred and thirty pupils. These pupils are distributed about the city in ten school buildings, and taught by eighteen teachers. Our schools are now rapidly regaining the ground lost during the overcrowded period of the boom. Nine teachers then endeavored to do the work of seventeen or eighteen, as our enrollment and average daily attendance far exceeded the provisions both of money and buildings.

We are now in serious need of proper school buildings. The Board of Education is compelled to rent five buildings but little better than barns, in order to accommodate the continually increasing attendance. This condition of affairs is neither the fault of the Board of Education nor of the citizens, bonds having been voted for this purpose (these bonds were declared illegal), but it is due to the indefiniteness of the provisions in the charter governing cities of the fifth class, as to whether school bond elections shall be called by the Board of Education, and the bonds issued by the County Supervisors; or be called, and the bonds sold by the City Council. I trust that this defect in our charter will be remedied by the next Legislature.

Rules and regulations governing the Board of Education and its employes have been adopted, as also a complete course of study, thus securing this year, for the first time, a thorough and permanent organization to our city schools.

Space will not permit more than a brief summary of the new lines of school work laid out and worked along throughout the past year. They are: Kindergarten busy work; reading, developed by the "object-word-sentence-script-phonetic" method, in the first year; language development, course of study from first to sixth year; oral and observation science work, from first to eighth year; course of supplementary reading; outline of morals and manners, training, etc.

We are endeavoring to train, develop, educate; and to do away with drive, push, and cram.

SAN DIEGO CITY.

EUGENE DE BURN, City Superintendent.

The growth and efficiency of the public schools of San Diego have kept pace with the material growth of the city, which, in the past few years, has been almost phenomenal. A few years ago five teachers comprised the whole corps needed for the instruction of the youth of the city; now sixty-one are employed, besides special teachers of music and drawing. The enrollment last year was two thousand seven hundred and thirty-nine, the average attendance one thousand nine hundred and eight, and the per cent of attendance 96.

The course of study covers a period of eight years.

In teaching numbers in the primary grades, the work is developed by the use of objects. The inch, foot, yard, pint, quart, and gallon are shown by rule and measure. The single fractional parts, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, etc., are taught, also Roman notation, and making small change with money. The book is not put into the hands of the pupils until they are in the

third year. Arithmetic is finished in the Grammar School, but is reviewed in the High School after the class has studied elementary algebra.

Language lessons begin the first day the child attends school—first, conversational lessons; afterwards, reproduction and composition, both oral and written. Grammar, as a science, belongs to the High School, but in teaching the use of language we give sufficient technical grammar to enable the pupil to understand the construction of the sentences he uses. Teaching language without teaching grammar has been sufficiently tried to demonstrate its failure.

In beginning reading, the first few weeks are devoted to conversation and to script and picture reading. Pupils use script from the first; they never print. Afterwards come the printed forms of words and phonics. We use, besides the State Readers, a large amount of well selected reading matter. We aim to have our pupils read, not for elocutionary effect, but to convey to the hearer the thoughts of the author as represented on the printed page.

Geography is begun in the third year, and is taught by observation, by conversation, by sand modeling, and by wall maps, using text-books and encyclopaedia. Our teachers are cautioned not to teach too much, especially of foreign countries.

In United States history the principal lines of thought are the political history and the financial history of our country, and the life and progress of the people, wars and dates of battles being matters of minor consideration.

In penmanship, the daily use of the blackboard, by both teacher and pupils, beginning with the first primary grade, is a great help in learning from and in acquiring confidence and freedom in movement.

A thorough drill in elementary bookkeeping, fitting pupils to take charge of the books of any common small business, is given in the eighth grade.

In the primary grades pupils learn to spell words in common use in all their lessons. Besides continuing this in the grammar grades, we are so old fashioned that we still use the spelling book.

Music and drawing are in charge of special teachers. The series of drawing books in use is Prang's Shorter Course.

The Normal music course has been used during the past two years. At first we had serious doubts as to the feasibility of instilling the rudiments of music into the minds of very young pupils. But experience has shown that in the lower as well as in the upper grades, pupils can receive musical training to advantage. In fact, we are of the opinion that the work should be commenced with the youngest pupils.

A general lesson is given each day in all classes, in either civil government and patriotism, practical entomology, manners and morals, the nature of alcoholic drinks and narcotics and their effects upon the human system, common things, or in one of the modern sciences.

Zoölogy.—First and second months (September and October).

Physiology.—Third and fourth months (November and December).

Physics.—Fifth and sixth months (January and February).

Botany.—Seventh and eighth months (March and April).

Civil Government.—Ninth and tenth months (May and June).

Entomology.—Special lessons.

Manners and Morals.—Special lessons.

Common Things.—Special lessons.

Each of these subjects is fully outlined for all the grades, the work being given by the teacher as an oral lesson, no text-books being used by the class. The time occupied is fifteen minutes each day, immediately after recess in the forenoon.

In connection with the work in physiology, alcoholic drinks and narcotics are treated of as fully in each grade as the comprehension of the pupils will permit. The teacher talks with the class of the manufacture of alcohol, its uses in the arts, and the beverages in which it is found. A brief history of tobacco is given, with the process of manufacture and the ways in which it is used. The description, uses, and hygiene of each part of the body; the skin, the muscles, the bones, the stomach, the lungs, etc., are taught; the effects of alcohol and tobacco are given with the hygiene. Caution as to using other narcotics, as opium and morphine, is given the pupils. This work is not only laid out in the course of study, but it is done in the school-room.

In the past year a savings bank system was introduced into the schools, which has been quite successful. In the first four months the children deposited \$1,376 14. Besides saving so much money from useless and sometimes harmful expenditure, the children are acquiring habits of thoughtful economy and thrift. They have learned that "one hundred cents make a dollar," and also some practical knowledge of the manner of transacting business with banks.

Besides one-room, two-room, and four-room school houses, we have four large school buildings in the city, each having eight session rooms, an office, a lavatory, and closets; three of these buildings having large, airy basements, and two large assembly-rooms, all being excellent in design and handsome in architecture, having every modern improvement for the convenience, health, and comfort of pupils and teachers.

Another large building of the same kind is needed in the eastern part of the city; besides, there should be several small one-room buildings in the most thickly populated parts of the city to accommodate the children in the first primary grade, so they need not go farther than one or two blocks from home.

The High School has outgrown its present accommodations—the Russ building. Besides the building is needed for the lower grades, and is not suitable for High School purposes. A High School building, with modern conveniences and ample accommodations suitable to its purposes, should be erected in the central part of the city, in a locality easy of access and convenient to street car lines.

Uniform programs, definite and fully outlined work, and close supervision are beginning to tell in more effective work and increased efficiency in our schools.

High School.

The High School, organized as such in January, 1888, by Mr. Frank H. Hyatt, Principal, still occupying the same position, had a membership of forty students the first year, sixty the second, and the enrollment for the current school year shows one hundred and fifty-two students.

Its course of study extends over a period of four years; its studies include all branches required for admission to the State University except the Greek. The number of teachers employed is six, besides special

teachers in music and drawing. The Board of Education has the past year introduced the study of Spanish.

In view of the location of San Diego, and its business relations with Mexico, this is a valuable feature of our High School work. Both German and French are taught for three years each in the school. Thorough Latin preparation for college is made by four years continuous instruction in that department. The school has added a fine piano during this school year, and about one hundred volumes to its working library.

In the matter of special instruction in the subject of alcoholics and narcotics, attention is given in the first year of the High School work in connection with the subject of physiology. Cards are made out showing the injurious effects upon the human system, and the subject illustrated by maps and charts.

The rapid growth of the city has, at times, been a source of crowding the work, but for the most part each branch is now receiving its just amount of time. The needs of the High School are, first of all, better equipment in apparatus in the scientific department. The study of physics, so much dwelt upon by State University authorities, needs a large amount of added material for practical work. The same is true for the chemistry, where a laboratory should be added. Should the school continue to grow, the demand for a new building, adapted to the special work of the High School, will soon become imperative. The spirit of the High School, on the part of both teachers and students, is progressive and harmonious.

REPORTS OF PRIVATE SCHOOLS.

In the last report it was suggested that private schools should be required by law to report to the Superintendent of Public Instruction, to the end that the exact number of children attending school in the State might be known. No action, however, was taken in the matter by the Legislature, and some months since an effort was made to obtain reports of the names and locations of private schools in each county from the County Superintendents. Circulars of inquiry, with blank reports, to be filled out and returned to this office, were mailed to the Principals of all private schools of which we could gain any knowledge. The reports received are herewith tabulated:

NAME OF SCHOOL.	Location.	Denomination.	Date of Opening.
<i>Alameda County.</i>			
Berkeley Gymnasium	Berkeley	Non-sectarian	1887
Brisbee's School	Oakland	Non-sectarian	1881
Boone's University School	Berkeley	Non-sectarian	1880
Bowen's Academy	Berkeley	Non-sectarian	1884
Gilson's Normal Training	Oakland	Non-sectarian	1888
Head's, Miss, School	Berkeley	Non-sectarian	1888
Hopkins Academy	Oakland	Congregational .....	.....
Horton's, Miss, School	Oakland	Non-sectarian	1883
Livermore College	Livermore	Non-sectarian	1871
Mills College	Mills College P. O.	Non-sectarian	1871
Notre Dame	Alameda	Catholic .....	.....
Sacred Heart Convent	Oakland	Catholic .....	.....
St. Anthony's	Brooklyn	Catholic .....	.....
St. Francis	Oakland	Catholic .....	.....
St. Francis (girls)	Oakland	Catholic .....	.....
St. Joseph's	Oakland	Catholic .....	.....
St. Joseph's Academy	Oakland	Catholic .....	.....
St. Joseph's Institute	Oakland	Catholic .....	.....
St. Lawrence	Temescal	Catholic .....	.....
St. Lawrence (girls)	Temescal	Catholic .....	.....
St. Mary's	Oakland	Catholic .....	.....
St. Mary's (girls)	Oakland	Catholic .....	.....
St. Mary's Convent	San Leandro	Catholic	1880
Snell Seminary	Oakland	Non-sectarian	1878
Washington College	Irvington	Non-sectarian	1873
<i>Butte County.</i>			
Chico Academy	Chico	Non-sectarian	1863
Oro Kindergarten	Oroville	Non-sectarian	1889
<i>Colusa County.</i>			
Orland Normal	Orland	Non-sectarian	1885
Pierce Christian College	College City	Christian Church	1874
<i>Del Norte County.</i>			
Crescent City School	Crescent City	Catholic	1889
<i>El Dorado County.</i>			
Placerville Academy	Placerville	Non-sectarian	1861
<i>Humboldt County.</i>			
Eureka Academy	Eureka	Non-sectarian	1887
St. Joseph's Institute	Eureka	Catholic	1871
<i>Inyo County.</i>			
Inyo Academy	Bishop	Methodist Episc.	1886
<i>Lake County.</i>			
Indian Day School	Lower Lake	Catholic	1888
Lakeport Academy	Lakeport	Non-sectarian	1884
<i>Los Angeles County.</i>			
Classical School for Boys	Pasadena	Non-sectarian	1889
Pomona College	Pomona	Congregational	1888
Pomona Private School	Pomona	Non-sectarian	1887
St. Hilda's School	Mason	Protestant Episc.	1889
<i>Marin County.</i>			
San Rafael Institute	San Rafael	Non-sectarian	1882
San Rafael School	San Rafael	Non-sectarian	1882
<i>Mendocino County.</i>			
Convent Sisters of Mercy	Ukiah	Catholic .....	.....

Name of Principal or President.	Instruct- ors.		PUPILS ENROLLED.										Total.
			Primary.		Academic.		Collegiate.		Normal.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
George Bates.....	14	2			55	5	20	2			82		
Miss S. B. Brisbee.....	2	3				40					40		
Philip S. Boone.....	3				15		15				30		
Thomas S. Bowens.....	3	2			7		14				21		
J. C. Gilson.....	1						6	3	1	53	63		
Anna Head.....		7	4	3	9	20					36		
	5	3									71		
Sarah W. Horton.....	1	7	2	1	28	58					89		
J. D. Smith.....	4	3			19	7	1	4			31		
Mrs. C. T. Mills.....	6	19				81		149			230		
Sister Francis.....						100					100		
Sister Elizabeth.....						86					86		
M. Gleeson.....					230						230		
Brother Vivian.....					142						142		
Sister M. Celestine.....						200					200		
Brother Sabinian.....					65						65		
Sister Mary.....						350					350		
Brother Lascian.....					350						350		
Brother Hugh.....					149						149		
Sister M. Leo.....						160					160		
Brother Leonard.....					210						210		
						130					130		
Sister Malicia.....		5			33	118					151		
Richard B. Snell.....	3	7				70		60			130		
J. Durham.....	5	6			52	40	15	12			119		
Rev. J. M. Woodman.....	1	2			39	24	5	3	4	10	85		
Frankie A. Titus.....		2	12	7							19		
William Henslee.....	1	1			20	18	10	12	2	8	70		
James C. Keith.....	6	2			8	7	32	23	5	5	80		
Amy Clark.....		1			6	6					12		
Lizzie H. Tindall.....		3			11	14	2	4		1	32		
Neil S. Phelps.....	6	6			33	24	90	24	12	31	214		
Sisters of Mercy.....		8	20	30	6	40					96		
W. G. Dixon.....	1	2			2	5	11	14	1	2	35		
Rev. P. Stanislaus.....		1			12	6					18		
John Overholser.....	1	1			32	33			4	6	75		
S. C. Clark.....	2	2			9		2				11		
E. C. Norton.....	3	3			30	16	12	14			72		
Cora T. Whitson.....		1	4	1	10	5					20		
Rev. John D. Easter.....	3	7				26		3			29		
Elizabeth L. Murrison.....	1	5			1	20					21		
O. I. Bates.....	3				36						36		
Sister Josephine.....						20					20		

NAME OF SCHOOL.	Location.	Denomination.	Date of Opening.
<i>Merced County.</i>			
Merced Academy	Merced	Non-sectarian	1888
<i>Napa County.</i>			
Napa College	Napa City	Methodist Episc.	1885
Oak Mound School	Napa City	Non-sectarian	1872
<i>Orange County.</i>			
St. Catherine's Academy	Anaheim	Catholic	1889
<i>Placer County.</i>			
Sierra Normal College	Auburn	Non-sectarian	1883
<i>San Benito County.</i>			
Commercial School	Hollister	Non-sectarian	1889
<i>San Bernardino County.</i>			
Bellevue Academy	Redlands	Non-sectarian	1886
St. Catherine's Convent	San Bernardino	Catholic	1880
San Bernardino Academy	San Bernardino	Non-sectarian	1883
<i>San Francisco County.</i>			
Kindergarten Training School	San Francisco	Non-sectarian	1880
College of Notre Dame of S. F.	San Francisco	Catholic	1866
Dominican Sisters	San Francisco	Catholic .....	.....
Lake's, Miss, School for Girls	San Francisco	Episcopalian	1887
Presentation Convent	San Francisco	Catholic .....	.....
Sacred Heart Convent	San Francisco	Catholic .....	.....
Sacred Heart College	San Francisco	Catholic	1874
Sacred Heart Presentation Convent	San Francisco	Catholic	1869
St. Bendom's School	San Francisco	Catholic .....	.....
St. Bridget School	San Francisco	Catholic .....	.....
St. Francis	San Francisco	Catholic .....	.....
St. Francis (boys)	San Francisco	Catholic .....	.....
St. Ignatius College	San Francisco	Catholic	1855
St. Joseph's	San Francisco	Catholic .....	.....
St. Joseph's (girls)	San Francisco	Catholic .....	.....
St. Rose's	San Francisco	Catholic .....	.....
St. Rose's (girls)	San Francisco	Catholic .....	.....
St. Peter's	San Francisco	Catholic .....	.....
St. Peter's (girls)	San Francisco	Catholic .....	.....
St. Patrick	San Francisco	Catholic .....	.....
St. Vincent's	San Francisco	Catholic .....	.....
Trinity School	San Francisco	Protestant Episc.	1876
Van Ness Young Ladies' Seminary	San Francisco	Non-sectarian	1876
West's, Miss, School	San Francisco	Non-sectarian	1873
Westminster School	San Francisco	Presbyterian	1859
<i>San Joaquin County.</i>			
St. Agnes	Stockton	Catholic .....	.....
St. Joseph's	Stockton	Catholic .....	.....
San Joaquin Valley College	Woodbridge	United Brethren	1879
Stockton Business College	Stockton	Non-sectarian	1875
<i>San Mateo.</i>			
Academy of Notre Dame	Redwood City	Catholic	1885
Belmont School	Belmont	Non-sectarian	1885
Bishop Armitage Orphanage	San Mateo	Episcopal	1886
Laurel Hall College	San Mateo	Non-sectarian	1870
St. Mathew's Hall	San Mateo	Episcopal	1866
<i>Santa Clara County.</i>			
Our Lady of Angels	Santa Clara	Catholic	1864
Mrs. Carey's School	San José	Non-sectarian	1868
College Notre Dame	San José	Catholic	1851

Name of Principal or President.	Instruct- ors.		PUPILS ENROLLED.								Total.
			Primary.		Academic.		Collegiate.		Normal.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Rev. A. McCalla -----	1	3									47
J. L. Beard -----	6	6			42	41	26	22			131
F. O. Mower -----	3	1			50		25				75
Mother Felicitas, O. P. -----		5			36	42	7	29			114
M. W. Ward -----	2	3			11	10	3	2	30	18	74
J. N. Thompson -----	1				11	6	23	21			61
Horace A. Brown -----	2	1			16	5	9	4	1	1	36
St. Carmen Divi -----		6	7	7	54	112		5			185
D. B. Sturgess -----	2	1			24	8	24	7			68
Kate D. Wiggin -----		3								35	35
Sister Aloyse -----		20	5	25		250		100			380
Sister Pia -----						113					113
Mary Lake -----	5	15			15	160		8			183
Sister Josephine -----						532					532
Madame O'Mera -----						110					110
Brother Genebern -----	20				420		46				466
Mother M. T. Augustine -----		11		20		459		6			485
Sister Emanuel -----						379					379
Sister Maurice -----						521					521
Sister Aloyse -----						212					212
Miss M. Latham -----					140						140
-----	17				580		29				609
Brother John -----					450						450
Sister Angela -----						460					460
Sister Philomena -----					507						507
Sister Clara -----						192					192
Brother Euphrasius -----					226						226
Sister Lorenza -----						400					400
Sister Frederica -----					347						347
Sister M. Vincent -----						537					537
Rev. E. B. Spaulding -----	10	1					81				81
S. H. Willey -----	2	8				12		30			42
Mary B. West -----	2	12			3	107		40			150
James Mathews -----	1	2	1	3	10	15	6	1			36
M. Evangelista -----						212					212
Sister M. Raphael -----						66					66
D. A. Mobley, A.M., D.D. -----	4	3			4	3	37	35	1	4	84
W. C. Ramsay -----	10	3					379	71	67	83	600
Sister Louis de Gonzague -----		5	10	22	14	86					132
W. T. Reid -----	7	3			49		26	1			76
Mrs. F. C. Brewer -----			14		37	1					52
John Gamble -----	7										93
Rev. A. L. Brewer -----	10	2			108		25				133
Sr. M. Beatrix -----		11	15	12		202					229
M. S. Carey -----		1	4	8							12
Sr. Amelia de St. Joseph -----	1	32		30	140	562					732

NAME OF SCHOOL.	Location.	Denomination.	Date of Opening.
St. Aloysius	San José	Catholic .....	.....
St. Joseph's College	San José	Catholic	1884.....
St. Joseph's (girls)	San José	Catholic .....	.....
San José Institute	San José	Episcopal	1875.....
Santa Clara College	Santa Clara	Catholic	1851.....
University of Pacific	College Park	Methodist	1851.....
<i>Santa Cruz County.</i>			
Froebel Kindergarten	Santa Cruz	Non-sectarian	1886.....
Private Kindergarten	Watsonville	Non-sectarian	1889.....
School of Holy Cross	Santa Cruz	Catholic	1862.....
<i>Solano County.</i>			
Irma Girl's School	Vallejo	Non-sectarian	1888.....
St. Gertrude's Academy	Rio Vista	Catholic	1876.....
St. Vincent's Convent School	Vallejo	Catholic	1870.....
Vacaville Academy	Vacaville	Congregational .....	.....
<i>Sonoma County.</i>			
Pacific Methodist College	Santa Rosa	M. E. South	1861.....
Petaluma Kindergarten	Petaluma	Non-sectarian	1889.....
St. Vincent's Academy	Petaluma	Catholic	1888.....
Santa Rosa Boys' School	Santa Rosa	Non-sectarian	1888.....
Santa Rosa Business College	Santa Rosa	Non-sectarian	1889.....
Santa Rosa Ladies' College	Santa Rosa	Non-sectarian	1884.....
Santa Rosa Seminary	Santa Rosa	Non-sectarian	1876.....
Ursuline Community	Santa Rosa	Catholic	1880.....
<i>Tulare County.</i>			
S. J. Valley Polytechnic Institute	Tulare	Non-sectarian	1890.....
<i>Yolo County.</i>			
Hesperian College	Woodland	Christian	1861.....
Holy Rosary Academy	Woodland	Catholic	1886.....
Woodland Business College	Woodland	Non-sectarian	1887.....
<i>Yuba County.</i>			
College Notre Dame	Marysville	Catholic	1856.....
Marysville Kindergarten	Marysville	Non-sectarian	1887.....

DEPARTMENT CIRCULAR.

TEACHERS' APPOINTMENTS AND EXAMINATIONS.

Inquiries from abroad regarding teachers' positions and examinations are so numerous as to necessitate answer by circular letter.

I have accordingly prepared the following circular, which is sent to all applicants for information:

SACRAMENTO, — — —, 189—.

In answer to your letter of inquiry, which has just been received, I am forced to say that the field for teachers in California is limited. For every position at all desirable which becomes vacant, there are many applicants already on the ground. It would, therefore, be quite unreasonable for any one, not being here, to expect to secure an appointment.

There are plenty of ordinary teachers always applying for positions; but superior, accredited teachers from the East, who have come with the determination to get a foothold and work their way up, have not been in the State long, as a rule, before securing positions.

If you decide to come to California, you must come expecting to take your chances with those who have preceded you from the States east of the Rocky Mountains, or have qualified themselves for their profession in our own Normal Schools, University, or other institutions for higher education.

The demand for teachers during the past year has been greater in the southern part of the State than elsewhere, owing to the phenomenal growth of that section.

Each local Board of Education or Trustees selects its own teachers and fixes their salaries.

The highest price paid to any public school teacher in California is \$250 per month; (few positions in the State pay that sum), and the lowest price is about \$40; very few schools pay below \$50 per month.

The average monthly salary paid to male teachers, during the last school year, was \$80 70; to female teachers, \$68 20. The length of time school is maintained each year varies in different parts of the State, from six to ten months. Board and lodging can generally be obtained in this State from \$20 to any higher sum per month. The commencement of the school term varies in different parts of the State, according to local conditions.

Each of the fifty-three counties has its own County Board of Education, which examines teachers and grants certificates of three grades: (1) Grammar School Course Certificates, valid for four years, and authorizing the holder to teach in a High or Grammar School; and (2) Grammar Grade Certificates, valid for three years, and authorizing the holder to teach a Grammar or Primary School; (3) Primary Certificates, valid for two years, authorizing the holder to teach a Primary School. The certificates so issued are valid in the counties only in which they are granted. The only credentials from other States upon which County Boards may issue certificates *without examination* are *State Normal School Diplomas, State Life Diplomas, and Nevada and Oregon State Educational Diplomas*. While the County Boards of Education now (since January 1, 1880) adopt their own rules and regulations for examining teachers, fix the time (semi-annually, however) for holding the examinations, and decide upon the branches of study and the percentage to be obtained in each, yet they have so largely followed the general system pursued by the State Board of Education, when, under the old Constitution, that body issued State certificates, that, except in the time for holding examinations, they do not materially differ. The following, from the rules adopted by the Colusa County Board, is given as a fair sample of all:

Rule II. Subjects for Primary Certificates shall be as follows:

1. Arithmetic	100	13. Penmanship	25
2. Arithmetic (mental)	50	14. Composition	25
3. Grammar	100	15. Reading	25
4. Grammar (oral)	25	16. Elements of bookkeeping (single	
5. Geography	50	entry)	25
6. Geography (oral)	25	17. Orthography	100
7. United States History	50	18. Vocal Music	25
8. United States History (oral)	25	19. Defining (Word Analysis)	50
9. Physiology	50	20. Practical Entomology	25
10. Physiology (oral)	25	21. Industrial Drawing	25
11. Methods of teaching	50		
12. Methods of teaching (oral)	25	Total	900

Necessary for Primary Certificate, 80 per cent, or 720.

(Note a)—Physiology is to be studied with special reference to alcoholic effects.

(Note b)—Orthography is no longer a test study.

(Note c)—Entomology is to be studied with special reference to fruit pests of California.

Section 1773 of Amended School Law reads as follows:

"All examinations shall be in writing in answer to questions formulated by the Board of Education. The said Board shall also examine all applicants, orally, touching the questions asked, and such other matters in connection therewith as shall have a tendency to demonstrate the fitness of the applicant to assume the duties of teacher. The said Board shall ask questions of practical utility, with a view of ascertaining the knowledge and ability of the applicant. All examinations shall be public."

Subjects for Grammar Grade Certificates shall be the same as for the Primary Certificates, with the following additions:

22. Algebra	50	26. School Law of California	25
23. Bookkeeping (double entry)	25	27. Botany	25
24. Physics	50	28. English and American Literature	50
25. Science of Government, or Constitu- tions of United States and Cali- fornia	25	Total	1,150

Necessary for a Grammar Grade Certificate, 85 per cent, or 977.

Subjects for Grammar School Course Certificates shall be the same as for Grammar Grade Certificates, with the following additions:

29. Geometry	50	31. General History	50
30. Rhetoric	50	Total	1,400

Necessary for Grammar School Course, 85 per cent, or 1,190.

Credits in composition and penmanship may be determined from the general execution of the papers.

Rule III. No certificate will be issued to any applicants failing to obtain 60 per cent in arithmetic or grammar. And no Grammar Grade or Grammar School Course Certificate will be granted unless the applicant obtain at least 70 per cent in each of these studies.

If you intend to come to this State, and desire further information, I would advise you to apply to the County Superintendents of Schools. Each County Superintendent is ex officio Secretary of the Board of Education of his county.

A list of the several County Superintendents was appended to this circular.

STATE SUPERINTENDENTS OF PUBLIC INSTRUCTION

FROM THE ORGANIZATION OF THE STATE GOVERNMENT.

NAME.	Elected.	Took Office.
John G. Marvin*	October 7, 1850	January 1, 1851.
Paul K. Hubbs†	September 7, 1853	January 1, 1854.
Andrew J. Moulder	November 4, 1856	January 1, 1857.
Andrew J. Moulder (second term)	September 7, 1859	January 2, 1860.
John Swett	September 3, 1862	January 1, 1863.
John Swett (second term)	October 21, 1863	December 1, 1863.
O. P. Fitzgerald	October 16, 1867	December 1, 1867.
H. N. Bolander	October 18, 1871	December 1, 1871.
Ezra S. Carr	October 20, 1875	December 1, 1875.
F. M. Campbell	September 3, 1879	January 5, 1880.
W. T. Welcker	November 7, 1882	January 1, 1883.
Ira G. Hoitt	November 2, 1886	January 3, 1887.

* Died December 10, 1857.

† Died November 17, 1874.

LIST OF COUNTY SUPERINTENDENTS SINCE 1880.

COUNTIES.	1880-83.	1883-87.	1887-91.	1891-95.
Alameda	Jewett C. Gilson	P. M. Fisher	P. M. Fisher	Geo. W. Frick.
Alpine	P. W. Parker	Mrs. Anna M. Arnott.	Mrs. Harriet A. Grover	Anna M. Arnott.
Amador	L. Miller	Joseph F. Chandler	George F. Mack	George F. Mack.
Butte	Jesse Wood	David W. Braddock	William M. Braddock	G. H. Stout.
Calaveras	T. G. Peachy	Charles R. Beal	William M. Nuner, Jr.	Wm. M. Nuner, Jr.
Colusa	Samuel Houchins	J. L. Wilson	J. L. Wilson	Mrs. H. L. Wilson.
Contra Costa	A. A. Bailey	A. A. Bailey	W. A. Kirkwood	W. A. Kirkwood.
Del Norte	John Miller	W. H. Jeter	Mrs. S. G. Wright	Mrs. S. G. Wright.
El Dorado	Charles E. Markham	Charles E. Markham	C. B. Wakefield	C. B. Wakefield.
Fresno	R. H. Bramlet	B. A. Hawkins	B. A. Hawkins	Thomas J. Kirk.
Humboldt	J. B. Casterlin	Neil S. Phelps	J. B. Brown	J. H. Shannon.
Inyo	F. S. Synnmes	Charles H. Groves	J. H. Shannon	J. H. Shannon.
Kern	F. S. Wallace	A. B. McPherson	Alfred Harrell	Alfred Harrell.
Lake	Mack Matheys	Mack Matheys	James H. Renfro	Mrs. E. K. Harrington.
Lassen	W. K. Schooler	Eugene A. Williams	Miss Myra A. Parks	Mrs. M. P. Woodin.
Los Angeles	J. W. Hinton	John W. Hinton	W. W. Seaman	Mrs. W. W. Seaman.
Marin	S. M. Augustine	Adelbert E. Kellogg	Robert Furlong	Robert Furlong.
Mariposa	W. D. Egenhoff	William D. Egenhoff	Mrs. William D. Egenhoff	Mrs. William D. Egenhoff.
Mendocino	James R. Thomas	John C. Ruddock	W. K. Dillingham	W. K. Dillingham.
Merced	E. T. Dixon	E. T. Dixon	J. A. Norvell	J. A. Norvell.
Modoc	E. P. Grubbs	Mrs. Alice Welch	Mrs. Alice Welch	J. A. Vergon.
Mono	Mrs. C. W. Sullivan	Miss Naomi Angell	Clay Hampton	Cornelia Richards.
Monterey	S. M. Shearer	M. J. Smeltzer	Job Wood, Jr.	Job Wood, Jr.
Napa	C. M. Walker	John L. Shearer	F. G. Huskey	Anna E. Dixon.
Nevada	John T. Wickes	A. J. Tiffany	A. J. Tiffany	W. J. Roger.
Orange			J. P. Greeley	J. P. Greeley.
Placer	O. F. Seavey	O. F. Seavey	R. F. Burns	O. F. Seavey.
Plumas	K. G. Hail	George E. Houghton	B. R. Foss	B. R. Foss.
Sacramento	Charles E. Bishop	Charles E. Bishop	B. F. Howard	B. F. Howard.
San Benito	J. N. Thompson	J. N. Thompson	J. N. Thompson	J. N. Thompson.
San Bernardino	J. A. Rousseau	Henry C. Brooke	Henry C. Brooke	G. W. Beattie.
San Diego	George N. Hitchcock	Rufus D. Butler	Rufus D. Butler	Harr Wagner.
San Francisco	John Ward Taylor	A. J. Moulder	J. W. Anderson	John Swett.
San Joaquin	C. M. Keniston	James A. Sellinger	George Goodell	Geo. Goodell.
San Luis Obispo	John F. Becket	J. M. Felts	W. M. Armstrong	W. M. Armstrong.
San Mateo	G. P. Hartley	G. P. Hartley	J. F. Utter	J. F. Utter.
Santa Barbara	G. E. Thurmond	G. E. Thurmond	G. E. Thurmond	G. E. Thurmond.
Santa Clara	L. J. Chipman	L. J. Chipman	L. J. Chipman	L. J. Chipman.

Santa Cruz	W. H. Hobbs	John W. Linscott	John W. Linscott
Shasta	Mrs. D. M. Coleman	Mrs. D. M. Coleman	Miss E. G. Welsh
Sierra	J. S. Wixson	J. S. Wixson	E. L. Case
Siskiyou	H. A. Morse	H. A. Morse	C. O. Sharpe
Solano	Albert W. Sutphen	C. B. Webster	C. B. Webster
Sonoma	C. S. Smyth	Charles S. Smyth	Mrs. F. McG. Martin
Stanislaus	W. H. Robinson	W. S. Chase	W. B. Howard
Sutter	F. W. Emerson	M. C. Clark	G. B. Lyman
Tehama	Myron Yager	Myron Yager	L. W. Valentine
Trinity	G. E. Noonan	Horace R. Given	Horace R. Given
Tulare	W. J. Ellis	Charles H. Murphy	Charles H. Murphy
Tuolumne	John T. Murnan	John T. Murnan	G. P. Morgan
Ventura	D. D. DeNure	Charles T. Meredith	Charles T. Meredith
Yolo	J. W. Goin	John W. Goin	George Banks
Yuba	Thomas H. Steel	Frank B. Crane	Frank B. Crane
			John W. Linscott
			Miss E. G. Welsh
			T. J. McGrath
			John Kennedy
			C. B. Webster
			Mrs. F. McG. Martin
			W. B. Howard
			G. B. Lyman
			Belle Miller
			George E. Noonan
			S. A. Cruikshank
			G. P. Morgan
			S. T. Black
			George Banks
			H. H. Folsom

STATISTICAL TABLES.

TABLE No. 1.

Census Statistics for the School Years ending June 30, 1889 and 1890.

COUNTIES.	Number of White Children between 5 and 17 years of age.					
	1889.			1890.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Alameda.....	11,100	10,712	21,812	11,620	11,201	22,821
Alpine.....	44	44	88	50	49	99
Amador.....	1,421	1,407	2,828	1,415	1,407	2,822
Butte.....	2,095	2,009	4,104	2,101	2,007	4,108
Calaveras.....	1,223	1,170	2,393	1,235	1,149	2,384
Colusa.....	1,664	1,610	3,274	1,742	1,642	3,384
Contra Costa.....	1,742	1,690	3,432	1,776	1,635	3,411
Del Norte.....	255	226	481	262	230	492
El Dorado.....	1,049	1,072	2,121	1,040	1,002	2,042
Fresno.....	3,310	3,008	6,318	3,452	3,341	6,793
Humboldt.....	2,992	2,867	5,859	3,165	3,012	6,177
Inyo.....	306	281	587	328	319	647
Kern.....	852	878	1,730	946	998	1,944
Lake.....	944	940	1,884	908	917	1,825
Lassen.....	524	486	1,010	498	490	988
Los Angeles.....	13,682	13,766	27,438	11,478	11,529	23,007
Marin.....	1,275	1,164	2,439	1,381	1,243	2,624
Mariposa.....	501	430	931	501	452	953
Mendocino.....	2,203	2,046	4,249	2,261	2,164	4,425
Merced.....	855	743	1,598	872	757	1,629
Modoc.....	705	697	1,402	779	718	1,497
Mono.....	146	154	300	153	143	296
Monterey.....	2,500	2,163	4,663	2,411	2,233	4,644
Napa.....	1,800	1,685	3,485	1,849	1,748	3,597
Nevada.....	2,138	2,091	4,229	2,210	2,117	4,327
Orange*.....				2,035	1,950	3,985
Placer.....	1,561	1,425	2,986	1,539	1,454	2,993
Plumas.....	509	502	1,011	480	501	981
Sacramento.....	3,700	3,561	7,261	3,888	3,774	7,662
San Benito.....	966	1,010	1,976	945	960	1,905
San Bernardino.....	3,000	2,868	5,868	3,182	3,021	6,203
San Diego.....	4,087	4,110	8,197	4,224	4,242	8,466
San Francisco.....	29,696	29,843	59,539	29,971	30,022	59,993
San Joaquin.....	3,084	3,059	6,143	3,052	3,096	6,148
San Luis Obispo.....	2,273	2,091	4,364	2,443	2,216	4,659
San Mateo.....	1,281	1,201	2,482	1,443	1,261	2,704
Santa Barbara.....	2,193	2,269	4,462	2,134	2,280	4,414
Santa Clara.....	5,915	5,844	11,759	6,157	6,064	12,221
Santa Cruz.....	2,265	2,358	4,623	2,456	2,448	4,904
Shasta.....	1,596	1,546	3,142	1,690	1,623	3,313
Sierra.....	545	509	1,054	519	487	1,006
Siskiyou.....	1,335	1,258	2,593	1,303	1,277	2,580
Solano.....	2,226	2,227	4,453	2,296	2,226	4,522
Sonoma.....	4,301	4,165	8,466	4,209	4,020	8,229
Stanislaus.....	1,161	1,186	2,347	1,192	1,176	2,368
Sutter.....	652	654	1,306	658	661	1,319
Tehama.....	1,354	1,277	2,631	1,328	1,252	2,580
Trinity.....	372	382	754	391	399	790
Tulare.....	3,150	2,870	6,020	3,252	2,963	6,215
Tuolumne.....	783	781	1,564	787	775	1,562
Ventura.....	1,266	1,242	2,508	1,381	1,312	2,693
Yolo.....	1,724	1,645	3,369	1,708	1,634	3,342
Yuba.....	1,053	1,080	2,133	1,034	1,068	2,102
Totals.....	137,174	134,292	271,466	140,130	136,665	276,795

* Included in Los Angeles County in 1889.

TABLE No. 1—Continued.

COUNTIES.	Number of Negro Children between 5 and 17 years of age.					
	1889.			1890.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Alameda	63	75	138	63	58	121
Alpine						
Amador	4	2	6		2	2
Butte	24	24	48	20	20	40
Calaveras	2	4	6	3	4	7
Colusa	9	5	14	14	10	24
Contra Costa	2	5	7	4	6	10
Del Norte					1	1
El Dorado	4	7	11	11	10	21
Fresno	36	33	69	34	34	68
Humboldt	2		2	2		2
Inyo	4		4	4		4
Kern	7	13	20	8	7	15
Lake	1		1		1	1
Lassen	1	1	2		2	2
Los Angeles	161	169	330	174	177	351
Marin	1	7	8	1	1	2
Mariposa	8	5	13	9	5	14
Mendocino	5	3	8	2	1	3
Merced	11	4	15	5	8	13
Modoc						
Mono						
Monterey	4	6	10	1	3	4
Napa	9	11	20	8	9	17
Nevada	16	14	30	12	13	25
Orange				6	6	12
Placer	2	3	5	2	2	4
Plumas						
Sacramento	40	41	81	60	60	120
San Benito	8	13	21	5	7	12
San Bernardino	28	15	43	28	26	54
San Diego	47	40	87	51	39	90
San Francisco	132	130	262	130	114	244
San Joaquin	43	39	82	46	48	94
San Luis Obispo	6	14	20	14	16	30
San Mateo	5	3	8	1		1
Santa Barbara	3	9	12	3	6	9
Santa Clara	25	35	60	28	41	69
Santa Cruz	4	5	9	8	6	14
Shasta	29	20	49	29	32	61
Sierra	2	5	7	1	5	6
Siskiyou	4	3	7	4	1	5
Solano	9	9	18	12	11	23
Sonoma	3	5	8	3	7	10
Stanislaus	7	4	11	6	3	9
Sutter	1		1	2		2
Tehama	29	40	69	25	43	68
Trinity						
Tulare	23	12	35	27	22	49
Tuolumne	1	3	4	1	1	2
Ventura		1	1	1	4	5
Yolo	21	16	37	24	16	40
Yuba	28	26	54	29	26	55
Totals	874	879	1,753	921	914	1,835

TABLE NO. 1—Continued.

COUNTIES.	Number of Indian Children between 5 and 17 years of age, under guardianship of white persons.					
	1889.			1890.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Alameda	7	1	8	6	4	10
Alpine	8	7	15	7	5	12
Amador	13	12	25	14	11	25
Butte	10	3	13	4	2	6
Calaveras		1	1		1	1
Colusa	1		1	1	1	2
Contra Costa	2	1	3	4		4
Del Norte	43	23	66	36	31	67
El Dorado	23	14	37	14	10	24
Fresno	16	12	28	25	19	44
Humboldt	12	6	18	12	7	19
Inyo	14	11	25	19	14	33
Kern	4	3	7	5	7	12
Lake				3	1	4
Lassen	7	14	21	10	8	18
Los Angeles	13	8	21	11	4	15
Marin	8	10	18	14	17	31
Mariposa	25	10	35	19	11	30
Mendocino		1	1		1	1
Merced	9	9	18	5	5	10
Modoc	3		3	2	1	3
Mono	2		2			
Monterey	5	2	7	3	1	4
Napa		1	1	1	1	2
Nevada				7	6	13
Orange		2	2			
Placer	8	9	17	6	8	14
Plumas	8		8	3	3	6
Sacramento						
San Benito	47	32	79	85	55	140
San Bernardino	15	15	30	21	15	36
San Diego						
San Francisco	2	2	4			
San Joaquin	9	8	17	17	23	40
San Luis Obispo				1		1
San Mateo	1		1			
Santa Barbara	1		1			
Santa Clara	3	1	4			
Santa Cruz	21	22	43	35	19	54
Shasta		2	2			
Sierra	15	20	35	21	27	48
Siskiyou	3		3	4	1	5
Solano	19	30	49	25	27	52
Sonoma	3	6	9	2	5	7
Stanislaus		1	1	2	1	3
Sutter	2	3	5	12	16	28
Tehama						
Trinity	2		2			
Tulare	14	9	23	11	10	21
Tuolumne	6	5	11		2	2
Ventura	1		1			
Yolo	5	3	8	3	1	4
Yuba						
Totals	410	319	729	470	381	851

TABLE No. 1—Continued.

COUNTIES.	Number of native born Chinese between 5 and 17 years of age.					
	1889.			1890.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Alameda	34	2	36	22	4	26
Alpine						
Amador	5	4	9	8	4	12
Butte	14	11	25	17	13	30
Calaveras	11	1	12	6	6	12
Colusa	2	1	3	2	1	3
Contra Costa					1	1
Del Norte						
El Dorado	22	9	31	9	4	13
Fresno	6	7	13	8	10	18
Humboldt						
Inyo						
Kern	6	2	8	3	2	5
Lake						
Lassen						
Los Angeles	9	1	10	9	9	18
Marin	32	30	62	6	7	13
Mariposa	2		2	1		1
Mendocino	8	5	13	6	3	9
Merced	2	1	3	3	1	4
Modoc						
Mono						
Monterey	18	25	43	33	34	67
Napa	2	2	4		1	1
Nevada	4	5	9	7	4	11
Orange				1		1
Placer	9	3	12	12	4	16
Plumas	2	1	3	1	2	3
Sacramento	45	22	67	30	17	47
San Benito					1	1
San Bernardino						
San Diego	4	1	5	12	9	21
San Francisco	480	361	841	503	404	907
San Joaquin	5	4	9	11	5	16
San Luis Obispo	1		1	3	1	4
San Mateo	1		1	1		1
Santa Barbara	3	2	5	4	2	6
Santa Clara	15	18	33	8	12	20
Santa Cruz	1		1			
Shasta	1	1	2	1	2	3
Sierra						
Siskiyou	23	12	35	27	11	38
Solano	2		2		1	1
Sonoma	1	3	4	1	1	2
Stanislaus	3	6	9	5	9	14
Sutter	1		1	1	1	2
Tehama	6	7	13	9	4	13
Trinity	2	1	3	8	6	14
Tulare	3	3	6	2	4	6
Tuolumne	2	3	5		1	1
Ventura				1	2	3
Yolo	1		1			
Yuba	9	3	12	10	7	17
Totals	797	557	1,354	791	610	1,401

TABLE No. 1--Continued.

COUNTIES.	Total No. of Census Children.	Total No. of Census Children.
	1889.	1890.
Alameda	21,994	22,978
Alpine	88	99
Amador	2,858	2,848
Butte	4,202	4,203
Calaveras	2,424	2,409
Colusa	3,294	3,412
Contra Costa	3,440	3,424
Del Norte	484	497
El Dorado	2,229	2,143
Fresno	6,437	6,903
Humboldt	5,889	6,223
Inyo	609	670
Kern	1,783	1,997
Lake	1,892	1,838
Lassen	1,012	994
Los Angeles	27,799	23,394
Marin	2,530	2,654
Mariposa	964	999
Mendocino	4,305	4,467
Merced	1,617	1,647
Modoc	1,420	1,507
Mono	303	299
Monterey	4,518	4,715
Napa	3,516	3,619
Nevada	4,269	4,365
Orange	3,005	4,011
Placer	1,031	3,013
Plumas	7,417	998
Sacramento	1,997	7,835
San Benito	5,990	1,918
San Bernardino	8,319	6,397
San Diego	60,642	8,613
San Francisco	6,238	61,144
San Joaquin	4,402	6,258
San Luis Obispo	2,491	4,733
San Mateo	4,480	2,707
Santa Barbara	11,853	4,429
Santa Clara	4,637	12,310
Santa Cruz	3,236	4,918
Shasta	1,063	3,431
Sierra	2,670	1,012
Siskiyou	4,476	2,671
Solano	8,527	4,551
Sonoma	2,376	8,293
Stanislaus	1,309	2,398
Sutter	2,718	1,328
Tehama	757	2,689
Trinity	6,063	804
Tulare	1,596	6,270
Tuolumne	2,520	1,586
Ventura	3,408	2,708
Yolo	2,207	3,382
Yuba		2,178
Totals	275,302	280,882

TABLE No. 1—Continued.

COUNTIES.	Number of Children under 5 years of age in 1889.				
	White.	Negro.	Indian.	Chinese.	Total.
Alameda.....	8,344	67	2	6	8,419
Alpine.....	31				31
Amador.....	1,113	4	10	2	1,129
Butte.....	1,516	8	4		1,528
Calaveras.....	832	3	1	1	837
Colusa.....	1,276	7	1		1,284
Contra Costa.....	1,390	1	1		1,392
Del Norte.....	179				179
El Dorado.....	728	2	31	1	762
Fresno.....	2,879	25	11	12	2,927
Humboldt.....	2,304			5	2,309
Inyo.....	226	2	1		229
Kern.....	671	5	7	5	688
Lake.....	667		2		669
Lassen.....	460	2			462
Los Angeles.....	11,659	163	11	20	11,853
Marin.....	931	1	12	15	959
Mariposa.....	384	5	13		402
Mendocino.....	1,893		10		1,903
Merced.....	709	3		3	715
Modoc.....	643				643
Mono.....	142				142
Monterey.....	1,969	2		6	1,977
Napa.....	1,292	3		2	1,297
Nevada.....	1,277	1		4	1,282
Orange.....					
Placer.....	1,141		3	4	1,148
Plumas.....	357		10		367
Sacramento.....	2,515	17	2	11	2,545
San Benito.....	704	2			706
San Bernardino.....	2,212	16	16		2,244
San Diego.....	3,219	20	8	6	3,253
San Francisco.....	22,220	119		333	22,672
San Joaquin.....	2,261	28		3	2,292
San Luis Obispo.....	1,832	8	8	2	1,850
San Mateo.....	798				798
Santa Barbara.....	1,770	1			1,771
Santa Clara.....	3,377	5	1	6	3,389
Santa Cruz.....	1,587	9	1	3	1,600
Shasta.....	1,268	17	12	4	1,301
Sierra.....	410	2			412
Siskiyou.....	1,032	4	19	8	1,063
Solano.....	1,546	1		4	1,551
Sonoma.....	2,834	3	15	2	2,854
Stanislaus.....	843		2	2	847
Sutter.....	505			3	508
Tehama.....	887	28	2	3	920
Trinity.....	250				250
Tulare.....	2,454	13		1	2,468
Tuolumne.....	389				389
Ventura.....	1,088				1,088
Yolo.....	1,131	14			1,145
Yuba.....	700	14	2	9	725
Totals.....	102,845	625	223	481	104,174

TABLE No. 1—Continued.

COUNTIES.	Number of Children under 5 years of age in 1890.				
	White.	Negro.	Indian.	Chinese.	Total.
Alameda	9,079	61		11	9,151
Alpine	33				33
Amador	1,121		8	2	1,131
Butte	1,540	8	2		1,550
Calaveras	843	2		1	846
Colusa	1,316	14			1,330
Contra Costa	1,412	3		1	1,416
Del Norte	223				223
El Dorado	712	1	30		743
Fresno	2,988	27	6	9	3,030
Humboldt	2,347		5		2,352
Inyo	210	2	1		213
Kern	705	8	8	5	726
Lake	727	4	5		736
Lassen	441				441
Los Angeles	9,866	142	5	19	10,032
Marin	899	3	2	10	914
Mariposa	363	5	12		380
Mendocino	1,876		3		1,879
Merced	699	3		1	702
Modoc	568				568
Mono	114				114
Monterey	2,011	3		22	2,036
Napa	1,297	2	3	8	1,310
Nevada	1,112	2	2	4	1,120
Orange	1,481		1	3	1,485
Placer	1,177				1,177
Plumas	363		7	1	371
Sacramento	2,651	18	1	27	2,697
San Benito	701	7		1	709
San Bernardino	2,339	21	25		2,385
San Diego	3,214	24	17	3	3,258
San Francisco	22,929	94		364	23,387
San Joaquin	2,328	39		5	2,372
San Luis Obispo	1,826		17		1,843
San Mateo	757				757
Santa Barbara	1,595			2	1,597
Santa Clara	3,449	13	1	4	3,517
Santa Cruz	1,716	7		2	1,725
Shasta	1,310	24	18	4	1,356
Sierra	388	1			389
Siskiyou	1,059	2	18	15	1,094
Solano	1,694	6		1	1,701
Sonoma	2,874	2	12	3	2,891
Stanislaus	857	1			858
Sutter	536	1		2	539
Tehama	831	20	9	3	863
Trinity	285			4	289
Tulare	2,573	25		2	2,600
Tuolumne	338	2	1		341
Ventura	1,152		5		1,157
Yolo	1,219	11			1,230
Yuba	708	21	3	6	738
Totals	104,901	629	227	545	106,302

TABLE No. 1—Continued.

COUNTIES.	Number of Children between 5 and 17 years of age who have attended public schools at any time during the school year of 1889.				
	White.	Negro.	Indian.	Chinese.	Total.
Alameda.....	14,418	83	2	4	14,507
Alpine.....	76				76
Amador.....	2,193	4	5	1	2,203
Butte.....	3,253	30	4		3,287
Calaveras.....	1,828	6	4		1,838
Colusa.....	2,550	7			2,557
Contra Costa.....	2,688	7			2,695
Del Norte.....	345		2		347
El Dorado.....	1,686	10	40		1,736
Fresno.....	4,748	33	22	2	4,805
Humboldt.....	4,468	1	20		4,489
Inyo.....	450	1	6		457
Kern.....	1,274	8			1,282
Lake.....	1,492	1	2		1,495
Lassen.....	806				806
Los Angeles.....	19,406	213	4	1	19,624
Marin.....	1,483	1	7		1,491
Mariposa.....	710	6	9	2	727
Mendocino.....	3,256	2	7		3,265
Merced.....	1,249	14	1	3	1,267
Modoc.....	1,117		5		1,122
Mono.....	252		1		253
Monterey.....	3,401	8			3,409
Napa.....	2,591	12			2,603
Nevada.....	3,533	25		9	3,567
Orange.....					
Placer.....	2,307	4			2,311
Plumas.....	879		12		891
Sacramento.....	5,514	39	1		5,554
San Benito.....	1,422	20			1,442
San Bernardino.....	4,141	17	4		4,162
San Diego.....	5,510	60	11		5,581
San Francisco.....	38,368	188		122	38,678
San Joaquin.....	4,590	66	2		4,658
San Luis Obispo.....	3,170	10	6		3,186
San Mateo.....	1,763	7			1,770
Santa Barbara.....	3,154	8	1		3,163
Santa Clara.....	7,542	34			7,576
Santa Cruz.....	3,564	6			3,570
Shasta.....	2,531	38	18		2,587
Sierra.....	859	4	1		864
Siskiyou.....	2,029	3	10		2,042
Solano.....	3,259	16	1		3,276
Sonoma.....	6,228	4	23		6,255
Stanislaus.....	1,869	11	6		1,886
Sutter.....	1,077	1	1		1,079
Tehama.....	2,126	47			2,173
Trinity.....	526				526
Tulare.....	4,665	20		1	4,686
Tuolumne.....	1,188	3		2	1,193
Ventura.....	1,897				1,897
Yolo.....	2,626	21			2,647
Yuba.....	1,630	44	3	2	1,688
Totals.....	193,696	1,143	241	149	195,229

TABLE No. 1—Continued.

COUNTIES.	Number of children between 5 and 17 years of age who have attended public school at any time during the school year of 1890.				
	White.	Negro.	Indian.	Chinese.	Total.
Alameda.....	14,907	84	2	2	14,995
Alpine.....	75				75
Amador.....	2,279	2	5	1	2,287
Butte.....	3,319	23	9		3,351
Calaveras.....	1,865	4	4		1,873
Colusa.....	2,643	14			2,657
Contra Costa.....	2,671	9	1		2,681
Del Norte.....	350		4		354
El Dorado.....	1,562	11	30		1,603
Fresno.....	5,170	39	15		5,224
Humboldt.....	4,694	1	24		4,719
Inyo.....	528	2	9		539
Kern.....	1,429	11	7	1	1,448
Lake.....	1,437		5		1,442
Lassen.....	807	2			809
Los Angeles.....	16,392	244	6	1	16,643
Marin.....	1,634	2	11		1,647
Mariposa.....	729	8	18	1	756
Mendocino.....	3,420	2	6	9	3,437
Merced.....	1,193	4		1	1,198
Modoc.....	1,176		8		1,184
Mono.....	239		2		241
Monterey.....	3,430	2			3,432
Napa.....	2,736	12	1		2,749
Nevada.....	3,626	17		3	3,646
Orange.....	2,902	3		1	2,906
Placer.....	2,302	3		1	2,306
Plumas.....	851		5		856
Sacramento.....	5,701	95	3	5	5,804
San Benito.....	1,386	7			1,393
San Bernardino.....	4,614	36	23		4,673
San Diego.....	6,202	77	7		6,286
San Francisco.....	37,739	188		62	37,989
San Joaquin.....	4,559	75		1	4,635
San Luis Obispo.....	3,412	16	19	1	3,448
San Mateo.....	1,897	1		1	1,898
Santa Barbara.....	3,149	2		2	3,153
Santa Clara.....	7,798	44			7,842
Santa Cruz.....	3,638	10			3,648
Shasta.....	2,638	46	14		2,689
Sierra.....	829	3			832
Siskiyou.....	2,057	4	25		2,086
Solano.....	3,271	14	1		3,286
Sonoma.....	6,066	7	26		6,099
Stanislaus.....	1,843	9	4		1,856
Sutter.....	1,074	1	3		1,078
Tehama.....	2,101	50	8		2,159
Trinity.....	518				518
Tulare.....	4,929	36			4,965
Tuolumne.....	1,269	2	5	1	1,277
Ventura.....	1,962				1,962
Yolo.....	2,586	24			2,610
Yuba.....	1,657	48	1		1,706
Totals.....	197,261	1,294	311	94	198,960

TABLE No. 1—Continued.

COUNTIES.	Number of Children between 5 and 17 years of age who have attended only private schools at any time during the school year of 1889.				
	White.	Negro.	Indian.	Chinese.	Total.
Alameda	2,862	11		6	2,879
Alpine	1				1
Amador	21				21
Butte	157		8		165
Calaveras	26				26
Colusa	101				101
Contra Costa	48				48
Del Norte	15				15
El Dorado	73				73
Fresno	165				165
Humboldt	163				163
Inyo	21	1			22
Kern	19				19
Lake	61				61
Lassen	26				26
Los Angeles	2,150	7		3	2,160
Marin	277				277
Mariposa	3				3
Mendocino	137				137
Merced	48				48
Modoc	22				22
Mono	10				10
Monterey	72			41	113
Napa	127				127
Nevada	118				118
Orange					
Placer	71				71
Plumas	10				10
Sacramento	467	1			468
San Benito	136				136
San Bernardino	255				255
San Diego	509	1	2		512
San Francisco	7,601	4		648	8,253
San Joaquin	519	1			520
San Luis Obispo	164				164
San Mateo	276				276
Santa Barbara	276				276
Santa Clara	1,419	4			1,423
Santa Cruz	148			1	149
Shasta	20			1	21
Sierra	11				11
Siskiyou	28			4	32
Solano	446			1	447
Sonoma	560	2			562
Stanislaus	29				29
Sutter	18			1	19
Tehama	59				59
Trinity	35				35
Tulare	55				55
Tuolumne	24				24
Ventura	39		2		41
Yolo	153	1			154
Yuba	242				242
Totals	20,293	33	12	706	21,044

TABLE No. 1—Continued.

COUNTIES.	Number of Children between 5 and 17 years of age who have attended only private schools at any time during the school year of 1890.				
	White.	Negro.	Indian.	Chinese.	Total.
Alameda.....	2,856	7		6	2,869
Alpine.....	1				1
Amador.....	25			4	29
Butte.....	54				54
Calaveras.....	15				15
Colusa.....	91			3	94
Contra Costa.....	50				50
Del Norte.....	11				11
El Dorado.....	35				35
Fresno.....	164	1		10	175
Humboldt.....	128				128
Inyo.....	22	1			23
Kern.....	32				32
Lake.....	32				32
Lassen.....	20		4		24
Los Angeles.....	1,829	7		14	1,850
Marin.....	428		3	11	442
Mariposa.....	11				11
Mendocino.....	90		6		96
Merced.....	23				23
Modoc.....	7				7
Mono.....	3				3
Monterey.....	62			17	79
Napa.....	109				109
Nevada.....	83			1	84
Orange.....	180	1	1		182
Placer.....	37			1	38
Plumas.....	35				35
Sacramento.....	536	3		6	545
San Benito.....	127				127
San Bernardino.....	238		1		239
San Diego.....	478	1		20	499
San Francisco.....	8,370	6		372	8,748
San Joaquin.....	526	1			527
San Luis Obispo.....	158				158
San Mateo.....	328				328
Santa Barbara.....	195				195
Santa Clara.....	1,568			1	1,569
Santa Cruz.....	267				267
Shasta.....	22				22
Sierra.....	15				15
Siskiyou.....	32				32
Solano.....	427	2	1	1	431
Sonoma.....	546	1			547
Stanislaus.....	18				18
Sutter.....	17				17
Tehama.....	70				70
Trinity.....	24				24
Tulare.....	67				67
Tuolumne.....	16				16
Ventura.....	47				47
Yolo.....	185	1			186
Yuba.....	234			1	235
Totals.....	20,944	32	16	468	21,460

TABLE No. 1—Continued.

COUNTIES.	Number of Children between 5 and 17 years of age who have not attended school at any time during the school year of 1889.				
	White.	Negro.	Indian.	Chinese.	Total.
Alameda	4,582	44	6	26	4,608
Alpine	11				11
Amador	614	2	10	8	634
Butte	604	18	13	25	750
Calaveras	539		9	12	560
Colusa	643	7	1	3	654
Contra Costa	696		1		697
Del Norte	121		1		122
El Dorado	362	1	26	31	420
Fresno	1,405	36	15	11	1,467
Humboldt	1,228	1	8		1,237
Inyo	116	2	12		130
Kern	437	12	25	7	481
Lake	331		5		336
Lassen	178	2			180
Los Angeles	5,882	110	17	6	6,015
Marin	679	7	14	62	762
Mariposa	218	7	9		234
Mendocino	856	6	28	13	903
Merced	301	1			302
Modoc	263		13		276
Mono	38		2		40
Monterey	990	2	2	2	996
Napa	767	8	7	4	786
Nevada	578	5	1		584
Orange					
Placer	608	1	2	12	623
Plumas	122		5	3	130
Sacramento	1,280	41	7	67	1,395
San Benito	418	1			419
San Bernardino	1,472	26	75		1,573
San Diego	2,178	26	17	5	2,226
San Francisco	13,570	70		71	13,711
San Joaquin	1,034	15	2	9	1,060
San Luis Obispo	1,030	10	11	1	1,052
San Mateo	443	1		1	445
Santa Barbara	1,032	4		5	1,041
Santa Clara	2,798	22	1	33	2,854
Santa Cruz	911	3	4	1	919
Shasta	591	11	25	1	628
Sierra	184	3	1		188
Siskiyou	536	4	25	31	596
Solano	748	2	2	1	753
Sonoma	1,678	2	26	4	1,710
Stanislaus	449		3	9	461
Sutter	211				211
Tehama	446	22	5	13	486
Trinity	193			3	196
Tulare	1,300	15	2	5	1,322
Tuolumne	352	1	23	3	379
Ventura	572	1	9		582
Yolo	590	15	1	1	607
Yuba	252	10	5	10	277
Totals	57,477	577	476	499	59,029

TABLE No. 1—Continued.

COUNTIES.	Number of Children between 5 and 17 years of age who have not attended school at any time during the school year of 1890.				
	White.	Negro.	Indian.	Chinese.	Total.
Alameda.....	5,058	30	8	18	5,114
Alpine.....	23				23
Amador.....	518		7	7	532
Butte.....	735	17	16	30	798
Calaveras.....	504	3	2	12	521
Colusa.....	650	10	1		661
Contra Costa.....	690	1	1	1	693
Del Norte.....	131	1			132
El Dorado.....	445	10	37	13	505
Fresno.....	1,459	28	9	8	1,504
Humboldt.....	1,355	1	20		1,376
Inyo.....	97	1	10		108
Kern.....	483	4	26	4	517
Lake.....	356	1	7		364
Lassen.....	161				161
Los Angeles.....	4,786	100	12	3	4,901
Marin.....	562		1	2	565
Mariposa.....	213	6	13		232
Mendocino.....	915	1	18		934
Merced.....	413	9	1	3	426
Modoc.....	314		2		316
Mono.....	54		1		55
Monterey.....	1,152	2		50	1,204
Napa.....	752	5	3	1	761
Nevada.....	618	8	2	7	635
Orange.....	903	8	12		923
Placer.....	654	1		14	669
Plumas.....	95		9	3	107
Sacramento.....	1,425	22	3	36	1,486
San Benito.....	392	5		1	398
San Bernardino.....	1,351	18	116		1,485
San Diego.....	1,786	12	29	1	1,828
San Francisco.....	13,884	50		473	14,407
San Joaquin.....	1,063	18		15	1,096
San Luis Obispo.....	1,089	14	21	3	1,127
San Mateo.....	479		1		480
Santa Barbara.....	1,070	7		4	1,081
Santa Clara.....	2,855	25		19	2,899
Santa Cruz.....	999	4			1,003
Shasta.....	653	15	40	3	711
Sierra.....	162	3			165
Siskiyou.....	491	1	23	38	553
Solano.....	824	7	3		834
Sonoma.....	1,617	2	26	2	1,647
Stanislaus.....	507		3	14	524
Sutter.....	228	1		2	231
Tehama.....	409	18	20	13	460
Trinity.....	248			14	262
Tulare.....	1,219	13		6	1,238
Tuolumne.....	277		16		293
Ventura.....	684	5	2	3	694
Yolo.....	571	15			586
Yuba.....	211	7	3	16	237
Totals.....	58,590	509	524	839	60,462

TABLE No. 1—Continued.

COUNTIES.	Native Born— Native Parents.		Native Born—One Parent Foreign.	
	1889.	* 1890.	1889.	1890.
Alameda	11,749	12,056	4,150	4,841
Alpine	58	45	31	36
Amador	1,852	1,864	796	799
Butte	4,290	4,374	696	636
Calaveras	1,797	1,853	615	667
Colusa	3,358	3,515	491	467
Contra Costa	1,711	1,796	910	810
Del Norte	448	479	154	162
El Dorado	1,770	1,906	555	446
Fresno	7,246	7,609	776	796
Humboldt	4,172	4,438	1,121	1,198
Inyo	518	534	168	183
Kern	1,855	2,050	354	379
Lake	2,046	2,031	202	246
Lassen	1,246	1,188	110	121
Los Angeles	26,362	22,394	5,057	3,963
Marin	1,028	1,074	790	828
Mariposa	794	821	227	214
Mendocino	4,369	4,420	657	760
Merced	1,637	1,561	252	270
Modoc	1,646	1,729	283	203
Mono	180	169	79	87
Monterey	3,660	3,695	1,121	1,204
Napa	2,614	2,548	571	683
Nevada	1,954	2,012	1,276	1,181
Orange		4,003		544
Placer	2,458	2,539	693	705
Plumas	748	748	262	237
Sacramento	5,350	5,500	1,734	1,701
San Benito	1,629	1,534	415	457
San Bernardino	6,158	6,587	801	824
San Diego	8,082	8,423	1,561	1,421
San Francisco	21,844	22,796	13,520	14,959
San Joaquin	5,304	5,170	1,053	1,269
San Luis Obispo	3,881	4,049	825	920
San Mateo	1,016	907	408	520
Santa Barbara	4,593	4,724	868	623
Santa Clara	7,860	8,186	2,388	2,613
Santa Cruz	3,887	3,925	852	955
Shasta	3,437	3,750	531	546
Sierra	644	622	339	340
Siskiyou	2,450	2,361	741	637
Solano	2,538	2,837	1,101	988
Sonoma	6,510	6,422	1,436	1,684
Stanislaus	2,247	2,250	321	308
Sutter	1,350	1,388	218	238
Tehama	2,959	2,814	314	374
Trinity	648	688	124	151
Tulare	7,189	7,534	621	638
Tuolumne	765	876	360	346
Ventura	2,681	3,008	385	344
Yolo	3,220	3,242	321	400
Yuba	1,809	1,813	466	395
Totals	199,617	204,947	54,100	56,317

TABLE No. 1—Continued.

COUNTIES.	Native Born—Both Parents Foreign.		Foreign Born.	
	1889.	1890.	1889.	1890.
Alameda	13,463	14,226	1,051	1,006
Alpine	29	41	1	10
Amador	1,294	1,232	45	84
Butte	658	674	86	69
Calaveras	818	715	31	20
Colusa	633	727	94	33
Contra Costa	2,123	2,133	88	101
Del Norte	59	78	2	1
El Dorado	641	503	25	31
Fresno	1,096	1,256	246	272
Humboldt	2,622	2,723	283	216
Inyo	142	155	10	11
Kern	240	248	22	46
Lake	269	255	44	42
Lassen	113	123	5	3
Los Angeles	6,583	5,664	1,650	1,405
Marin	1,620	1,592	51	74
Mariposa	336	322	9	22
Mendocino	1,100	1,051	82	115
Merced	354	456	89	62
Modoc	101	128	33	15
Mono	179	78	7	79
Monterey	1,615	1,763	99	89
Napa	1,550	1,598	78	100
Nevada	2,231	2,250	90	42
Orange		751		198
Placer	954	899	48	47
Plumas	334	320	54	64
Sacramento	2,793	3,168	85	163
San Benito	634	592	25	44
San Bernardino	820	920	455	451
San Diego	1,605	1,629	324	398
San Francisco	45,896	44,896	2,054	1,880
San Joaquin	2,025	1,988	148	203
San Luis Obispo	1,382	1,446	164	161
San Mateo	1,781	1,868	84	79
Santa Barbara	682	587	108	92
Santa Clara	4,478	4,436	516	592
Santa Cruz	1,418	1,643	80	120
Shasta	506	407	63	84
Sierra	472	390	20	49
Siskiyou	415	611	127	156
Solano	2,270	2,292	118	135
Sonoma	3,132	2,755	303	323
Stanislaus	590	635	65	63
Sutter	241	235	8	4
Tehama	338	323	27	41
Trinity	226	246	9	8
Tulare	648	623	73	75
Tuolumne	828	680	32	25
Ventura	450	409	92	99
Yolo	948	913	64	57
Yuba	646	698	11	10
Totals	116,381	116,351	9,378	9,569

TABLE No. 1—Continued.

COUNTIES.	Number of Births during the year.					
	1889.			1890.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Alameda	494	514	1,008	915	858	1,773
Alpine	4	4	8	3	3	6
Amador	106	100	206	102	114	216
Butte	127	151	278	135	126	261
Calaveras	64	86	150	88	81	169
Colusa	88	121	209	111	92	203
Contra Costa	145	129	274	123	133	256
Del Norte	21	8	29	20	28	48
El Dorado	46	51	97	52	51	103
Fresno	200	237	527	286	268	554
Humboldt	205	196	401	89	93	182
Inyo	19	23	42	24	22	46
Kern	50	48	98	68	62	130
Lake	60	49	109	22	30	52
Lassen	44	26	70	36	53	89
Los Angeles	1,105	1,122	2,227	1,056	1,071	2,127
Marin	57	101	158	69	76	145
Mariposa	27	33	60	25	26	51
Mendocino	153	191	344	169	167	336
Merced	67	73	140	84	84	168
Modoc	56	51	107	39	37	76
Mono	12	11	23	5	5	10
Monterey	179	215	394	191	205	396
Napa	110	116	226	127	122	249
Nevada	134	118	252	121	149	270
Orange				136	131	267
Placer	101	113	214	122	87	209
Plumas	38	51	89	28	28	56
Sacramento	168	153	321	245	231	476
San Benito	79	59	138	51	58	109
San Bernardino	188	163	351	234	219	453
San Diego	364	294	658	259	240	499
San Francisco	1,520	1,468	2,988	1,780	1,765	3,545
San Joaquin	198	207	405	254	233	487
San Luis Obispo	152	181	333	171	152	323
San Mateo	64	46	110	71	74	145
Santa Barbara	145	171	316	161	133	294
Santa Clara	308	290	598	218	211	429
Santa Cruz	158	158	316	176	169	345
Shasta	138	117	255	116	126	242
Sierra	28	43	71	34	54	88
Siskiyou	178	118	296	160	67	227
Solano	112	103	215	44	48	92
Sonoma	240	253	493	280	266	546
Stanislaus	65	68	133			
Sutter	33	41	74	58	56	112
Tehama	76	95	171	88	64	152
Trinity	22	24	46	30	25	55
Tulare	246	200	455	198	229	427
Tuolumne	55	48	103	45	29	74
Ventura	87	94	181	112	97	209
Yolo	92	101	193	89	102	191
Yuba	45	49	94	71	75	146
Totals	8,563	8,491	17,054	9,189	8,925	18,114

TABLE No. 2.

School Statistics—Attendance at School.

COUNTIES.	Number enrolled in Public Schools in 1889.			Number enrolled in Public Schools in 1890.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Alameda	8,196	7,968	16,182	9,299	8,498	17,797
Alpine	37	47	84	39	40	79
Amador	1,179	1,166	2,345	1,157	1,173	2,330
Butte	1,877	1,834	3,711	1,930	1,873	3,803
Calaveras	962	933	1,895	965	959	1,924
Colusa	1,425	1,369	2,794	1,486	1,386	2,872
Contra Costa	1,482	1,424	2,906	1,477	1,396	2,873
Del Norte	198	190	388	221	225	446
El Dorado	799	832	1,631	862	860	1,722
Fresno	2,735	2,571	5,306	3,044	2,966	6,010
Humboldt	2,580	2,436	5,016	2,635	2,445	5,080
Inyo	253	229	482	279	275	554
Kern	649	725	1,374	739	810	1,549
Lake	846	797	1,643	786	782	1,568
Lassen	460	476	936	466	464	930
Los Angeles	11,293	11,034	22,327	9,648	9,420	19,068
Marin	789	811	1,600	825	750	1,575
Mariposa	434	370	804	423	406	829
Mendocino	1,915	1,846	3,761	2,036	1,950	3,986
Merced	681	596	1,277	709	647	1,356
Modoc	656	626	1,282	599	577	1,176
Mono	142	140	282	133	132	265
Monterey	1,895	1,675	3,570	1,953	1,748	3,701
Napa	1,469	1,442	2,911	1,489	1,493	2,982
Nevada	1,810	1,746	3,556	1,694	1,610	3,304
Orange				1,766	1,685	3,451
Placer	1,283	1,216	2,499	1,307	1,219	2,526
Plumas	509	485	994	471	465	936
Sacramento	3,187	3,290	6,477	3,208	3,326	6,534
San Benito	798	784	1,582	803	803	1,606
San Bernardino	2,417	2,254	4,671	2,552	2,364	4,916
San Diego	3,506	3,480	6,986	3,431	3,477	6,908
San Francisco	22,515	20,111	42,626	22,781	20,145	42,926
San Joaquin	2,543	2,555	5,098	2,746	2,863	5,609
San Luis Obispo	1,910	1,645	3,555	2,031	1,814	3,845
San Mateo	920	895	1,815	975	889	1,864
Santa Barbara	1,824	1,781	3,605	1,848	1,800	3,648
Santa Clara	4,267	3,960	8,227	4,408	4,169	8,577
Santa Cruz	2,022	1,975	3,997	2,059	2,029	4,088
Shasta	1,599	1,519	3,118	1,642	1,586	3,228
Sierra	491	522	1,013	445	442	887
Siskiyou	1,103	1,046	2,149	1,172	1,117	2,289
Solano	1,957	1,637	3,594	1,994	1,687	3,681
Sonoma	3,610	3,317	6,927	3,499	3,341	6,840
Stanislaus	1,042	1,060	2,102	1,029	1,022	2,051
Sutter	676	637	1,313	626	627	1,253
Tehama	1,174	1,146	2,320	1,133	1,142	2,275
Trinity	240	296	536	244	291	535
Tulare	2,641	2,409	5,050	2,844	2,543	5,387
Tuolumne	580	618	1,198	663	666	1,329
Ventura	1,013	864	1,877	1,195	1,049	2,244
Yolo	1,432	1,367	2,799	1,427	1,398	2,820
Yuba	859	855	1,714	871	853	1,724
Totals	110,880	105,025	215,905	114,064	107,692	221,756

TABLE No. 2—Continued.

Attendance at School.

COUNTIES.	Average Number Belonging.		Average Daily Attendance.		Percentage of Attendance on Average Number Belonging.	
	1889.	1890.	1889.	1890.	1889.	1890.
Alameda	12,176	12,795	11,481	11,964	.94	.94
Alpine	59	58	54	53	.91	.91
Amador	1,708	1,820	1,577	1,668	.92	.91
Butte	2,540	2,547	2,361	2,361	.93	.93
Calaveras	1,311	1,302	1,168	1,177	.89	.90
Colusa	2,201	2,049	1,865	1,875	.85	.91
Contra Costa	2,021	1,969	1,871	1,832	.92	.93
Del Norte	280	278	262	257	.93	.92
El Dorado	1,155	1,214	1,047	1,105	.91	.91
Fresno	3,404	3,911	3,128	3,607	.92	.92
Humboldt	3,381	3,528	3,116	3,278	.92	.92
Inyo	332	396	306	369	.92	.93
Kern	837	985	784	907	.94	.92
Lake	1,065	1,048	960	952	.90	.90
Lassen	569	557	524	505	.92	.90
Los Angeles	15,723	13,574	14,797	12,722	.94	.93
Marin	1,192	1,091	1,113	1,004	.95	.92
Mariposa	568	587	517	531	.90	.90
Mendocino	2,287	2,553	2,069	2,367	.90	.92
Merced	913	875	838	809	.92	.92
Modoc	792	755	728	694	.92	.92
Mono	227	185	212	167	.93	.90
Monterey	2,343	2,382	2,160	2,202	.92	.93
Napa	2,022	2,092	1,865	1,933	.92	.92
Nevada	2,783	2,634	2,589	2,424	.93	.92
Orange		2,554		2,275		.89
Placer	1,884	1,831	1,662	1,591	.88	.87
Plumas	807	697	751	646	.93	.93
Sacramento	4,755	5,176	4,377	4,662	.92	.90
San Benito	1,136	1,065	1,040	985	.91	.92
San Bernardino	3,222	3,507	2,980	3,261	.92	.93
San Diego	4,586	4,702	4,279	4,400	.93	.94
San Francisco	33,405	33,261	31,609	31,352	.95	.94
San Joaquin	3,606	3,815	3,348	3,520	.93	.92
San Luis Obispo	2,284	2,515	2,097	2,307	.92	.92
San Mateo	1,282	1,268	1,176	1,169	.92	.92
Santa Barbara	2,416	2,571	2,190	2,254	.91	.88
Santa Clara	5,813	6,122	5,523	5,785	.95	.94
Santa Cruz	2,739	2,768	2,567	2,607	.94	.94
Shasta	1,931	1,956	1,784	1,801	.92	.92
Sierra	701	645	652	595	.93	.92
Siskiyou	1,429	1,418	1,291	1,284	.90	.90
Solano	2,595	2,667	2,396	2,496	.92	.93
Sonoma	4,611	4,625	4,264	4,297	.92	.92
Stanislaus	1,502	1,454	1,374	1,336	.91	.92
Sutter	959	917	883	836	.92	.91
Tehama	1,525	1,547	1,428	1,424	.93	.92
Trinity	383	378	356	346	.93	.92
Tulare	3,411	3,643	3,177	3,383	.93	.93
Tuolumne	911	930	828	830	.91	.89
Ventura	1,330	1,510	1,219	1,339	.91	.89
Yolo	2,079	2,096	1,926	1,923	.92	.91
Yuba	1,268	1,247	1,164	1,122	.92	.90
Totals	154,459	158,070	143,733	146,589	.93	.92

TABLE No. 2—Continued.
Classification of Public School Pupils.

COUNTIES.	High School Grade.		Grammar School Course.		Grammar Grade.	
	1889.	1890.	1889.	1890.	1889.	1890.
Alameda	664	742	114	108	4,392	5,452
Alpine					28	24
Amador			137	154	304	220
Butte			165	183	650	671
Calaveras					478	456
Colusa			78	138	243	236
Contra Costa			13	54	1,038	960
Del Norte					41	57
El Dorado					254	387
Fresno	8	101			497	841
Humboldt				375	1,030	875
Inyo					174	111
Kern	14				177	280
Lake					179	136
Lassen					209	178
Los Angeles	136	255	23	180	2,910	2,452
Marin	23	36	15	15	430	465
Mariposa					202	237
Mendocino				383	822	491
Merced					315	274
Modoc			2		268	272
Mono					105	73
Monterey	48	48			710	764
Napa			106	131	281	401
Nevada					1,754	1,552
Orange				30		712
Placer					439	510
Plumas					345	342
Sacramento	194	211			1,727	1,941
San Benito	22				401	401
San Bernardino					1,084	1,360
San Diego	94	106	5	77	875	951
San Francisco	1,023	1,254			14,059	14,370
San Joaquin	108	128	66	85	1,126	1,248
San Luis Obispo			129	176	222	306
San Mateo			65	58	545	483
Santa Barbara	28	28	22	146	467	335
Santa Clara	237	264	41	113	2,830	2,773
Santa Cruz	33	26	449	526	291	248
Shasta			15		764	760
Sierra					329	275
Siskiyou					392	372
Solano	67	68	139	88	884	928
Sonoma	137	184	77	80	1,569	1,515
Stanislaus	46	42	70	10	572	506
Sutter					421	469
Tehama			186	139	228	319
Trinity	23	18			90	95
Tulare			277	276	573	628
Tuolumne					403	508
Ventura				33	383	451
Yolo					719	1,091
Yuba	23	37			479	424
Totals	2,928	3,548	2,194	3,558	49,708	52,186

TABLE No. 2—Continued.
Classification of Public School Pupils.

COUNTIES.	Primary Grade.		Total Number of Pupils.	
	1889.	1890.	1889.	1890.
Alameda	11,012	11,495	16,182	17,797
Alpine	56	55	84	79
Amador	1,904	1,956	2,345	2,330
Butte	2,896	2,949	3,711	3,803
Calaveras	1,417	1,468	1,895	1,924
Colusa	2,473	2,498	2,794	2,872
Contra Costa	1,855	1,859	2,906	2,873
Del Norte	347	389	388	446
El Dorado	1,377	1,335	1,631	1,722
Fresno	4,801	5,068	5,306	6,010
Humboldt	3,986	3,830	5,016	5,080
Inyo	308	443	482	554
Kern	1,183	1,269	1,374	1,549
Lake	1,464	1,432	1,643	1,568
Lassen	727	752	936	930
Los Angeles	19,258	16,181	22,327	19,068
Marin	1,132	1,059	1,600	1,575
Mariposa	602	592	804	829
Mendocino	2,939	3,112	3,761	3,986
Merced	962	1,082	1,277	1,356
Modoc	1,012	904	1,282	1,176
Mono	177	192	282	265
Monterey	2,812	2,889	3,570	3,701
Napa	2,524	2,450	2,911	2,982
Nevada	1,802	1,752	3,556	3,304
Orange		2,709		3,451
Placer	2,060	2,016	2,499	2,526
Plumas	649	594	994	936
Sacramento	4,556	4,382	6,477	6,534
San Benito	1,159	1,205	1,582	1,606
San Bernardino	3,587	3,556	4,671	4,916
San Diego	6,012	5,774	6,986	6,908
San Francisco	27,544	27,302	42,626	42,926
San Joaquin	3,798	4,148	5,098	5,609
San Luis Obispo	3,204	3,363	3,555	3,845
San Mateo	1,205	1,323	1,815	1,864
Santa Barbara	3,088	3,139	3,605	3,648
Santa Clara	5,119	5,427	8,227	8,577
Santa Cruz	3,224	3,288	3,997	4,088
Shasta	2,339	2,468	3,118	3,228
Sierra	684	612	1,013	887
Siskiyou	1,757	1,917	2,149	2,289
Solano	2,504	2,597	3,594	3,681
Sonoma	5,144	5,061	6,927	6,840
Stanislaus	1,414	1,493	2,102	2,051
Sutter	892	784	1,313	1,253
Tehama	1,906	1,817	2,320	2,275
Trinity	423	422	536	535
Tulare	4,200	4,483	5,050	5,387
Tuolumne	795	821	1,198	1,329
Ventura	1,494	1,760	1,877	2,244
Yolo	2,080	1,729	2,799	2,820
Yuba	1,212	1,263	1,714	1,724
Totals	161,075	162,464	215,905	221,756

TABLE No. 2—Continued.

Number of Schools.

COUNTIES.	Number of High Schools.		Number of Grammar School Course Schools.		Number of Grammar Schools.	
	1889.	1890.	1889.	1890.	1889.	1890.
Alameda.....	3	3	2	2	128	118
Alpine.....						1
Amador.....			4	4	11	11
Butte.....			1	1	23	25
Calaveras.....					20	21
Colusa.....			1	2	19	23
Contra Costa.....			1	2	33	34
Del Norte.....					3	2
El Dorado.....					12	20
Fresno.....		1			27	47
Humboldt.....				1	30	32
Inyo.....					9	9
Kern.....					17	18
Lake.....			1		11	8
Lassen.....					12	10
Los Angeles.....	1	1	3	2	111	94
Marin.....	1	1	1	1	15	14
Mariposa.....					11	13
Mendocino.....				7	47	50
Merced.....					20	20
Modoc.....			1		5	5
Mono.....					2	2
Monterey.....	1	1			24	31
Napa.....			1	1	10	18
Nevada.....					48	46
Orange.....				1		34
Placer.....					34	35
Plumas.....					24	25
Sacramento.....	1	1			78	85
San Benito.....					7	9
San Bernardino.....					28	35
San Diego.....	1	1	1	1	35	44
San Francisco.....	2	3			21	21
San Joaquin.....	1	1	2	2	51	51
San Luis Obispo.....			3	6	14	23
San Mateo.....			2	2	25	30
Santa Barbara.....	1	1	1	3	22	23
Santa Clara.....	3	3	2	2	98	95
Santa Cruz.....	1	1	2	2	25	26
Shasta.....					44	49
Sierra.....					9	9
Siskiyou.....					24	26
Solano.....	1	1	3	3	24	26
Sonoma.....	3	3	2	3	83	89
Stanislaus.....		1	2	1	37	34
Sutter.....					14	15
Tehama.....			2	2	32	43
Trinity.....					1	1
Tulare.....			3	3	59	61
Tuolumne.....					13	13
Ventura.....				1	8	11
Yolo.....					26	30
Yuba.....	1	1			13	15
Totals.....	21	24	41	55	1,497	1,630

TABLE No. 2—Continued.

Number of Schools.

COUNTIES.	Number of Primary Schools.		Total Number of Schools.		Number of New School Houses Erected.	
	1889.	1890.	1889.	1890.	1889.	1890.
Alameda.....	168	177	301	300	2	4
Alpine.....	4	3	4	4		
Amador.....	43	46	58	61	2	1
Butte.....	53	50	77	76	2	1
Calaveras.....	35	35	55	56	3	3
Colusa.....	65	61	85	86	1	
Contra Costa.....	37	34	71	70	1	1
Del Norte.....	10	11	13	13	1	1
El Dorado.....	40	35	52	55	3	3
Fresno.....	117	114	144	162	20	17
Humboldt.....	89	90	119	123	6	4
Inyo.....	4	4	13	13		3
Kern.....	22	33	39	51	5	2
Lake.....	31	35	43	43	2	1
Lassen.....	21	24	33	34	5	4
Los Angeles.....	308	283	423	380	25	7
Marin.....	29	30	46	46	1	
Mariposa.....	22	21	33	34	3	1
Mendocino.....	47	53	94	110	15	8
Merced.....	20	21	40	41	3	1
Modoc.....	27	28	33	33	2	2
Mono.....	8	8	10	10		
Monterey.....	80	78	105	110	6	2
Napa.....	42	58	53	77	2	1
Nevada.....	34	35	82	81		
Orange.....		35		70		3
Placer.....	36	34	70	69	3	
Plumas.....	7	5	31	30	1	
Sacramento.....	77	87	156	173	1	1
San Benito.....	43	42	50	51	1	2
San Bernardino.....	76	83	104	118	20	4
San Diego.....	146	156	183	202	18	38
San Francisco.....	48	48	71	72	3	
San Joaquin.....	77	82	131	136	4	3
San Luis Obispo.....	88	63	105	92	4	8
San Mateo.....	23	21	50	53		3
Santa Barbara.....	57	59	81	86	6	4
Santa Clara.....	79	88	182	188	4	1
Santa Cruz.....	63	71	91	100	3	2
Shasta.....	52	51	96	100	5	8
Sierra.....	18	19	27	28		1
Siskiyou.....	40	36	64	62	2	
Solano.....	25	63	53	93	1	1
Sonoma.....	98	105	186	200	4	4
Stanislaus.....	29	32	68	68	2	
Sutter.....	29	27	43	42	4	
Tehama.....	43	31	77	76	1	2
Trinity.....	17	17	18	18		
Tulare.....	89	87	151	151	11	5
Tuolumne.....	22	23	35	36		
Ventura.....	43	46	51	58	6	4
Yolo.....	47	44	73	74		1
Yuba.....	37	36	51	52	4	1
Totals.....	2,765	2,858	4,324	4,567	218	163

TABLE No. 2—Continued.

School Houses.

COUNTIES.	Number of School Houses built of Brick, Stone, or Adobe.		Number of School Houses built of Wood.		Total Number of School Houses.	
	1889.	1890.	1889.	1890.	1889.	1890.
Alameda			75	79	75	79
Alpine			4	4	4	4
Amador	3	3	36	37	39	40
Butte	6	6	75	76	81	82
Calaveras	1	2	51	51	52	53
Colusa	5	4	61	63	66	67
Contra Costa	2	1	54	55	56	56
Del Norte			10	10	10	10
El Dorado			51	52	51	52
Fresno	4	3	103	119	107	122
Humboldt			96	100	96	100
Inyo			11	11	11	11
Kern	1	3	38	41	39	44
Lake	1	1	39	37	40	38
Lassen			31	32	31	32
Los Angeles	6	6	159	143	165	149
Marin			34	34	34	34
Mariposa			27	31	27	31
Mendocino	1		82	89	83	89
Merced	2	2	37	39	39	41
Modoc	1	1	30	32	31	33
Mono			9	8	9	8
Monterey	1	1	82	89	83	90
Napa			53	56	53	56
Nevada			54	54	54	54
Orange		1		32		33
Placer			54	52	54	52
Plumas	2	2	22	24	24	26
Sacramento	6	6	76	79	82	85
San Benito			43	43	43	43
San Bernardino	11	11	56	60	67	71
San Diego	7	6	83	116	90	122
San Francisco	6	6	61	61	67	67
San Joaquin		10	92	84	92	94
San Luis Obispo	2	2	85	93	87	95
San Mateo			29	30	29	30
Santa Barbara	4	4	53	52	57	56
Santa Clara			83	83	83	83
Santa Cruz			61	61	61	61
Shasta	5	5	82	83	87	88
Sierra			22	22	22	22
Siskiyou	4	6	60	54	64	60
Solano	2	2	58	58	60	60
Sonoma	1	1	138	138	139	139
Stanislaus	3	3	51	50	54	53
Sutter	2	2	35	35	37	37
Tehama	3	3	60	60	63	63
Trinity			16	16	16	16
Tulare	2	4	119	121	121	125
Tuolumne	4	3	29	28	33	31
Ventura	2	3	36	36	38	39
Yolo	1	1	51	54	52	55
Yuba	1	1	38	39	39	40
Totals	102	115	2,895	3,006	2,997	3,121

TABLE No. 2—Continued.

Number and Condition of School Districts.

COUNTIES.	Number of School Districts.		Number of New Districts Organized.		Districts Having Suitable Accommodations for all who may wish to Attend School.	
	1889.	1890.	1889.	1890.	1889.	1890.
Alameda	53	54	1	1	43	47
Alpine	4	4			3	3
Amador	41	42	1	1	41	38
Butte	77	75	2	1	76	73
Calaveras	48	49	1	1	46	45
Colusa	67	69	2	2	62	66
Contra Costa	50	48	2		49	46
Del Norte	8	8			7	5
El Dorado	55	55	2	1	52	51
Fresno	107	114	7	5	87	105
Humboldt	80	80	5		74	74
Inyo	12	12			8	11
Kern	39	44	5	2	39	36
Lake	42	43	2	1	33	37
Lassen	31	32	2	2	25	31
Los Angeles	132	103	14	3	109	80
Marin	34	34		1	31	27
Mariposa	31	31	1	3	23	27
Mendocino	83	89	10	6	67	75
Merced	41	41	2	3	38	38
Modoc	33	33	2		28	33
Mono	9	9	1		9	9
Monterey	84	85	7	4	74	75
Napa	52	52	3		38	51
Nevada	47	47			47	47
Orange		33		2		27
Placer	54	52	2		53	49
Plumas	27	26			21	20
Sacramento	70	69	1	1	68	64
San Benito	44	43	2	2	38	42
San Bernardino	62	65	1	4	61	61
San Diego	101	119	23		84	97
San Francisco	12	12			12	12
San Joaquin	82	82	2	1	77	82
San Luis Obispo	89	90	3	3	65	77
San Mateo	31	31	1		27	27
Santa Barbara	51	53	4	2	46	50
Santa Clara	74	74	1		72	74
Santa Cruz	53	53	3	1	47	51
Shasta	87	90	2	3	70	69
Sierra	23	24		1	21	23
Siskiyou	61	62	4	4	22	62
Solano	55	55			53	51
Sonoma	133	133	4	1	125	128
Stanislaus	53	52	1	2	51	49
Sutter	37	37			34	37
Tehama	62	61			60	58
Trinity	16	16			16	16
Tulare	118	120	6	4	102	110
Tuolumne	29	30		1	28	28
Ventura	37	43	3	6	35	43
Yolo	51	54	1	3	49	52
Yuba	39	39	3		39	35
Totals	2,811	2,871	139	76	2,285	2,624

TABLE No. 2—Continued.

Districts.

COUNTIES.	Districts not having suitable accommodations for all pupils who may wish to Attend School.		Districts whose Schools are provided with Water-closets.		Districts whose Schools are not provided with Water-closets.	
	1880.	1890.	1880.	1890.	1880.	1890.
Alameda.....	9	7	52	54	-----	-----
Alpine.....	1	1	4	3	-----	1
Amador.....	-----	2	41	40	-----	-----
Butte.....	1	2	76	71	1	4
Calaveras.....	2	4	43	49	5	-----
Colusa.....	5	3	48	62	19	7
Contra Costa.....	-----	2	49	48	1	-----
Del Norte.....	1	3	8	8	-----	-----
El Dorado.....	-----	4	52	55	-----	-----
Fresno.....	20	9	96	102	11	12
Humboldt.....	6	6	67	66	13	14
Inyo.....	4	1	12	12	-----	-----
Kern.....	-----	8	38	37	-----	7
Lake.....	7	4	18	29	22	12
Lassen.....	4	-----	26	30	3	1
Los Angeles.....	21	22	115	85	15	17
Marin.....	3	6	34	32	-----	1
Mariposa.....	7	4	24	24	6	7
Mendocino.....	10	8	64	60	12	23
Merced.....	2	3	40	41	-----	-----
Modoc.....	5	-----	31	33	2	-----
Mono.....	-----	-----	9	9	-----	-----
Monterey.....	10	10	72	84	12	1
Napa.....	14	1	51	52	1	-----
Nevada.....	-----	-----	47	47	-----	-----
Orange.....	-----	5	-----	32	-----	-----
Placer.....	1	3	54	52	-----	-----
Plumas.....	6	6	27	26	-----	-----
Sacramento.....	2	5	64	67	6	2
San Benito.....	4	1	41	43	1	-----
San Bernardino.....	1	-----	56	60	6	1
San Diego.....	17	23	81	112	20	7
San Francisco.....	-----	-----	12	12	-----	-----
San Joaquin.....	-----	-----	76	82	1	-----
San Luis Obispo.....	21	13	73	80	13	10
San Mateo.....	4	4	31	31	-----	-----
Santa Barbara.....	5	3	51	53	-----	-----
Santa Clara.....	2	-----	74	74	-----	-----
Santa Cruz.....	3	2	50	53	-----	-----
Shasta.....	15	19	62	72	23	16
Sierra.....	2	1	23	24	-----	-----
Siskiyou.....	38	-----	22	62	38	-----
Solano.....	-----	2	53	52	-----	1
Sonoma.....	1	4	101	99	30	33
Stanislaus.....	2	2	50	43	3	8
Sutter.....	3	-----	37	36	-----	1
Tehama.....	2	3	60	57	2	4
Trinity.....	-----	-----	14	12	2	4
Tulare.....	10	6	112	116	-----	-----
Tuolumne.....	1	2	29	29	-----	1
Ventura.....	-----	-----	34	43	1	-----
Yolo.....	2	-----	51	52	-----	-----
Yuba.....	-----	4	39	30	-----	9
Totals.....	274	218	2,494	2,637	269	204

TABLE No. 2—Continued.

Districts.

COUNTIES.	Number of Districts whose Schools have Sufficient Grounds.		Number of Districts whose Schools have not Sufficient Grounds.		Number of Districts whose Grounds are Suitably Im- proved.	
	1889.	1890.	1889.	1890.	1889.	1890.
Alameda.....	52	49	—	5	31	40
Alpine.....	4	4	—	—	—	—
Amador.....	41	34	—	6	4	14
Butte.....	76	72	1	3	76	70
Calaveras.....	43	45	5	4	10	10
Colusa.....	54	66	13	3	31	26
Contra Costa.....	48	46	1	2	33	33
Del Norte.....	8	8	—	—	4	—
El Dorado.....	47	49	5	6	24	22
Fresno.....	102	113	5	1	28	12
Humboldt.....	72	71	8	9	59	67
Inyo.....	9	6	3	6	3	1
Kern.....	39	44	—	—	7	4
Lake.....	35	38	5	3	17	14
Lassen.....	28	31	1	—	12	6
Los Angeles.....	120	91	10	11	51	57
Marin.....	26	24	8	9	23	12
Mariposa.....	30	30	—	1	2	5
Mendocino.....	59	71	18	12	33	30
Merced.....	39	38	1	3	12	21
Modoc.....	33	32	—	1	—	—
Mono.....	8	9	1	—	—	2
Monterey.....	81	79	3	6	14	3
Napa.....	47	51	5	1	21	28
Nevada.....	47	46	—	1	47	46
Orange.....	—	30	—	2	—	20
Placer.....	51	50	3	2	46	45
Plumas.....	24	28	3	—	8	4
Sacramento.....	69	69	1	—	53	53
San Benito.....	41	43	1	—	4	1
San Bernardino.....	55	59	7	2	40	39
San Diego.....	89	107	12	12	27	92
San Francisco.....	12	12	—	—	12	12
San Joaquin.....	77	81	—	1	70	77
San Luis Obispo.....	81	88	5	2	31	38
San Mateo.....	24	26	7	5	22	19
Santa Barbara.....	45	49	6	4	5	1
Santa Clara.....	67	74	—	—	67	34
Santa Cruz.....	47	52	3	1	36	38
Shasta.....	82	84	3	4	9	15
Sierra.....	23	24	—	—	1	1
Siskiyou.....	7	40	41	22	—	1
Solano.....	48	53	5	—	19	44
Sonoma.....	108	131	23	1	83	93
Stanislaus.....	52	4	1	47	4	7
Sutter.....	35	36	2	1	25	29
Tehama.....	62	61	—	—	29	24
Trinity.....	16	15	—	1	16	13
Tulare.....	109	116	3	—	1	114
Tuolumne.....	28	29	1	1	2	4
Ventura.....	35	43	—	—	7	28
Yolo.....	49	52	2	—	—	8
Yuba.....	39	38	—	1	39	24
Totals.....	2,523	2,639	222	202	1,309	1,401

TABLE No. 2—Continued.

Districts.

COUNTIES.	Number of School Districts whose Grounds are not Suitably Improved.		Number of Districts whose School Houses are Well Ventilated.		Number of Districts whose School Houses are not Well Ventilated.	
	1889.	1890.	1889.	1890.	1889.	1890.
Alameda	21	14	52	54	-----	-----
Alpine	4	4	4	4	-----	-----
Amador	37	26	41	40	-----	-----
Butte	1	5	77	75	-----	-----
Calaveras	38	39	48	49	-----	-----
Colusa	36	43	67	69	-----	-----
Contra Costa	16	15	49	48	-----	-----
Del Norte	4	8	8	8	-----	-----
El Dorado	28	33	52	55	-----	-----
Fresno	79	102	88	98	19	16
Humboldt	21	13	79	80	1	-----
Inyo	9	11	11	12	1	-----
Kern	32	40	36	44	3	-----
Lake	23	27	40	41	-----	-----
Lassen	17	25	29	31	-----	-----
Los Angeles	79	45	130	101	-----	1
Marin	11	21	34	33	-----	-----
Mariposa	28	26	30	31	-----	-----
Mendocino	44	53	77	83	-----	-----
Merced	28	20	40	41	-----	-----
Modoc	33	33	33	33	-----	-----
Mono	9	7	9	9	-----	-----
Monterey	70	82	81	85	3	-----
Napa	31	24	51	52	1	-----
Nevada	-----	1	47	47	-----	-----
Orange	-----	12	-----	32	-----	-----
Placer	8	7	54	52	-----	-----
Plumas	19	22	25	26	2	-----
Sacramento	17	16	69	68	1	1
San Benito	38	42	42	43	-----	-----
San Bernardino	22	22	62	61	-----	-----
San Diego	74	27	31	85	71	44
San Francisco	-----	-----	12	12	-----	-----
San Joaquin	7	5	77	82	-----	-----
San Luis Obispo	55	52	81	89	5	1
San Mateo	9	12	31	31	-----	-----
Santa Barbara	46	52	51	53	-----	-----
Santa Clara	7	40	74	74	-----	-----
Santa Cruz	14	15	50	53	-----	-----
Shasta	76	73	84	87	1	1
Sierra	22	23	5	7	18	17
Siskiyou	60	61	60	62	-----	-----
Solano	34	9	52	53	1	-----
Sonoma	48	39	126	132	5	-----
Stanislaus	49	44	53	51	-----	-----
Sutter	12	8	37	37	-----	-----
Tehama	33	37	41	40	21	21
Trinity	-----	3	16	16	-----	-----
Tulare	111	2	112	116	-----	-----
Tuolumne	27	26	29	29	-----	1
Ventura	28	15	35	43	-----	-----
Yolo	51	44	51	52	-----	-----
Yuba	-----	15	39	38	-----	1
Totals	1,455	1,440	2,611	2,747	153	104

TABLE No. 2—Continued.

Districts.

COUNTIES.	Districts whose Schools are supplied with good Furniture.		Districts whose Schools are supplied with passable Furniture.		Districts whose Schools are supplied with poor Furniture.	
	1889.	1890.	1889.	1890.	1889.	1890.
Alameda.....	38	52	14	1		1
Alpine.....	1	2	2		1	
Amador.....	38	29		6	3	5
Butte.....	74	68		4	3	3
Calaveras.....	13	17	16	20	19	12
Colusa.....	49	56	6	6	12	7
Contra Costa.....	48	44		1	1	3
Del Norte.....	7	1		6	1	1
El Dorado.....	24	34	14	19	14	2
Fresno.....	76	93	13	13	18	8
Humboldt.....	62	66	10	4	8	10
Inyo.....	3	6	8	4	1	2
Kern.....	28	29	2	2	9	13
Lake.....	26	31	2		12	10
Lassen.....	14	10	8	13	7	8
Los Angeles.....	101	73	22	15	7	14
Marin.....	32	26	1	7	1	
Mariposa.....	12	18	17	13	1	
Mendocino.....	19	44	24	28	33	17
Merced.....	26	34	11	4	3	3
Modoc.....	17	16	5	8	11	9
Mono.....	8	9			1	
Monterey.....	73	59		8	10	18
Napa.....	32	20	8	26	12	6
Nevada.....	33	43	11	2	3	2
Orange.....		20		10		2
Placer.....	46	49	4	1	4	2
Plumas.....	9	15	12	4	6	7
Sacramento.....	56	59			14	10
San Benito.....	39	42	1		2	1
San Bernardino.....	55	46	5	13	2	2
San Diego.....	71	72	12	33	20	14
San Francisco.....	12	12				
San Joaquin.....	77	80		2		
San Luis Obispo.....	57	65	3	6	26	19
San Mateo.....	27	24	2	6	2	1
Santa Barbara.....	50	43		9	1	1
Santa Clara.....	76	73	4			1
Santa Cruz.....	48	51	2	2		
Shasta.....	15	37	43	24	27	27
Sierra.....	18	18	5	6		
Siskiyou.....	4	7	34	28	12	27
Solano.....	46	33	4	18	3	2
Sonoma.....	110	122	7	7	14	3
Stanislaus.....	49	40		5	4	6
Sutter.....	35	37	2			
Tehama.....	38	35	20	19	4	7
Trinity.....	14	13	2	1		2
Tulare.....	81	83	12	26	19	7
Tuolumne.....	19	27	6		4	2
Ventura.....	33	35	1		1	8
Yolo.....	50	52	1			
Yuba.....	32	34	3		4	5
Totals.....	2,021	2,104	379	432	360	310

TABLE No. 2—Continued.

Districts.

COUNTIES.	Districts whose Schools are well sup- plied with Apparatus.		Districts whose Schools are passably supplied with Apparatus.		Districts whose Schools are poorly supplied with Apparatus.	
	1889.	1890.	1889.	1890.	1889.	1890.
Alameda.....	36	43	16	10	-----	1
Alpine.....	1	2	2	1	1	1
Amador.....	34	28	3	9	4	3
Butte.....	71	68	4	4	1	3
Calaveras.....	6	6	23	28	19	15
Colusa.....	34	29	17	21	16	19
Contra Costa.....	46	48	-----	-----	3	-----
Del Norte.....	1	-----	2	4	5	4
El Dorado.....	9	17	29	32	14	6
Fresno.....	37	39	53	65	17	10
Humboldt.....	53	61	15	10	12	9
Inyo.....	3	8	6	1	3	3
Kern.....	24	26	3	2	12	16
Lake.....	9	29	7	4	14	8
Lassen.....	5	6	12	16	12	9
Los Angeles.....	57	53	56	39	17	10
Marin.....	18	23	15	10	1	-----
Mariposa.....	7	13	21	18	2	-----
Mendocino.....	27	50	25	23	24	16
Merced.....	8	27	18	8	14	6
Modoc.....	6	6	24	12	3	15
Mono.....	8	9	-----	-----	1	-----
Monterey.....	55	27	1	11	28	47
Napa.....	24	20	18	26	10	6
Nevada.....	33	44	11	-----	3	3
Orange.....	-----	10	-----	17	-----	5
Placer.....	25	30	22	18	7	4
Plumas.....	13	4	7	17	7	5
Sacramento.....	64	60	-----	-----	6	9
San Benito.....	39	43	1	-----	2	-----
San Bernardino.....	55	45	5	14	2	2
San Diego.....	21	17	37	64	43	38
San Francisco.....	-----	-----	12	12	-----	-----
San Joaquin.....	66	78	11	4	-----	-----
San Luis Obispo.....	52	52	5	17	29	21
San Mateo.....	20	23	7	4	4	4
Santa Barbara.....	-----	-----	47	52	4	1
Santa Clara.....	67	62	5	12	2	-----
Santa Cruz.....	41	49	9	4	-----	-----
Shasta.....	2	30	69	44	14	14
Sierra.....	7	8	15	14	1	2
Siskiyou.....	6	12	21	25	33	25
Solano.....	32	16	18	35	3	2
Sonoma.....	98	103	11	24	22	5
Stanislaus.....	48	29	-----	15	5	7
Sutter.....	30	26	5	10	2	1
Tehama.....	16	20	33	34	13	7
Trinity.....	9	8	5	8	2	-----
Tulare.....	73	39	28	72	11	5
Tuolumne.....	19	25	8	3	2	1
Ventura.....	35	38	-----	-----	-----	5
Yolo.....	-----	-----	51	52	-----	-----
Yuba.....	23	32	8	-----	6	7
Totals.....	1,473	1,541	821	925	456	380

TABLE No. 2—Continued.

Length of School Terms.

COUNTIES.	Districts maintain- ing School less than six months.		Districts maintain- ing School six months, but less than eight.		Districts maintain- ing School eight months or more.	
	1889.	1890.	1889.	1890.	1889.	1890.
Alameda.....		1		2	51	51
Alpine.....			2	3	2	1
Amador.....		1	13	12	28	29
Butte.....			12	12	67	63
Calaveras.....			9	10	39	39
Colusa.....			4	11	63	58
Contra Costa.....			1	3	48	45
Del Norte.....			3	2	5	6
El Dorado.....			38	43	14	12
Fresno.....			33	37	74	77
Humboldt.....	1		29	23	50	57
Inyo.....		1	6	5	6	6
Kern.....			11	12	28	32
Lake.....		1	6	15	24	26
Lassen.....		2	8	19	22	11
Los Angeles.....	9	2	13	5	110	96
Marin.....			1	3	33	30
Mariposa.....			23	28	7	3
Mendocino.....		1	13	10	71	72
Merced.....			15	11	25	30
Modoc.....	2	1	23	29	8	3
Mono.....	1		2	1	6	
Monterey.....	1	1	5	6	78	78
Napa.....	1		2	1	48	51
Nevada.....			6	9	41	38
Orange.....		3		1		29
Placer.....			17	12	37	40
Plumas.....			24	26	3	
Sacramento.....			10	12	60	57
San Benito.....	1	2	4	1	37	40
San Bernardino.....	1	3	3	5	57	57
San Diego.....	4	9	8	13	90	97
San Francisco.....					12	12
San Joaquin.....		3	4	8	73	71
San Luis Obispo.....			21	20	65	69
San Mateo.....			4	3	27	28
Santa Barbara.....		1	6	5	45	47
Santa Clara.....	1		4	2	69	72
Santa Cruz.....			4	5	46	48
Shasta.....			35	39	30	49
Sierra.....		2	17	14	6	8
Siskiyou.....	2	1	17	34	41	28
Solano.....			11	17	79	46
Sonoma.....	2	1	8	7	121	125
Stanislaus.....	1		9	12	43	39
Sutter.....		2	19	15	18	20
Tehama.....			19	29	43	32
Trinity.....		1	10	8	6	7
Tulare.....		2	77	88	36	30
Tuolumne.....		2	4	8	25	20
Ventura.....		7	3	3	31	33
Yolo.....		1	4	9	47	42
Yuba.....	3	2	12	15	24	22
Totals.....	30	53	632	723	2,119	2,090

TABLE No. 2—Continued.

COUNTIES.	LENGTH OF SCHOOL TERMS.		VISITS.	
	Average number of Months of all the Schools in the County		Number of School Visits made by County Superintendents.	
	1889.	1890.	1889.	1890.
Alameda.....	9.85	9.40	292	356
Alpine.....	7.81	7.37	9	10
Amador.....	8.00	8.09	64	58
Butte.....	8.00	8.01	116	110
Calaveras.....	8.22	8.01	56	61
Colusa.....	8.07	7.87	84	22
Contra Costa.....	8.41	8.30	94	115
Del Norte.....	8.00	8.28	20	17
El Dorado.....	7.23	7.13	60	64
Fresno.....	7.66	7.66	150	142
Humboldt.....	8.15	7.98	128	125
Inyo.....	7.43	7.41	12	16
Kern.....	8.40	7.70	45	62
Lake.....	7.89	7.75	46	54
Lassen.....	7.70	7.06	32	26
Los Angeles.....	8.59	8.80	295	307
Marin.....	8.39	8.40	87	87
Mariposa.....	7.04	6.33	30	26
Mendocino.....	8.23	7.94	93	94
Merced.....	7.71	7.86	45	44
Modoc.....	6.84	6.30	41	39
Mono.....	8.14	8.00	14	11
Monterey.....	8.20	8.11	139	153
Napa.....	8.37	8.50	64	75
Nevada.....	8.44	8.08	130	120
Orange.....		8.11		74
Placer.....	7.65	8.27	79	91
Plumas.....	7.10	6.46	31	33
Sacramento.....	8.70	8.10	74	74
San Benito.....	8.07	8.00	57	65
San Bernardino.....	8.33	8.50	108	137
San Diego.....	8.20	8.00	48	86
San Francisco.....	10.00	10.00	1,359	1,125
San Joaquin.....	8.38	8.12	90	126
San Luis Obispo.....	7.94	7.94	70	69
San Mateo.....	9.25	9.00	60	70
Santa Barbara.....	8.50	8.30	141	148
Santa Clara.....	8.60	8.78	215	250
Santa Cruz.....	8.66	8.68	96	100
Shasta.....	7.50	7.33	143	132
Sierra.....	7.05	6.98	27	27
Siskiyou.....	7.00	7.30	61	63
Solano.....	8.04	8.00	95	103
Sonoma.....	8.27	8.31	202	208
Stanislaus.....	7.92	8.00	92	89
Sutter.....	7.53	7.33	45	38
Tehama.....	7.70	7.59	88	88
Trinity.....	7.40	7.09	69	71
Tulare.....	7.20	6.80	201	202
Tuolumne.....	8.03	7.68	35	39
Ventura.....	8.00	7.13	119	93
Yolo.....	8.21	7.77	97	121
Yuba.....	7.80	7.70	106	46
Totals.....	8.02	7.88	5,954	5,964

TABLE No. 2—Continued.

COUNTIES.	VISITS.				TEACHERS.	
	Number of School Visits made by School Trustees.		Number of School Visits made by other persons.		Number of Male Teachers.	
	1889.	1890.	1889.	1890.	1889.	1890.
Alameda.....	2,179	3,097	8,485	8,801	44	47
Alpine.....	9	7	81	20		
Amador.....	200	205	1,162	1,630	17	18
Butte.....	390	431	2,683	2,897	26	26
Calaveras.....	126	193	1,572	2,047	11	14
Colusa.....	196	188	1,736	1,595	39	36
Contra Costa.....	198	166	1,091	1,297	15	13
Del Norte.....	36	41	227	284	7	5
El Dorado.....	215	195	1,437	1,128	14	20
Fresno.....	498	485	2,501	2,961	46	50
Humboldt.....	320	367	1,930	2,698	55	47
Inyo.....	46	38	160	263	11	7
Kern.....	102	157	736	1,081	16	16
Lake.....	129	148	914	1,073	15	7
Lassen.....	58	77	627	736	12	13
Los Angeles.....	1,547	1,196	11,079	8,937	98	76
Marin.....	155	151	841	913	9	10
Mariposa.....	112	102	731	747	10	12
Mendocino.....	228	252	1,561	1,811	28	34
Merced.....	92	135	861	1,040	15	14
Modoc.....	73	91	792	784	18	15
Mono.....	73	48	294	213	3	3
Monterey.....	449	455	2,655	2,536	19	17
Napa.....	175	188	1,261	2,058	15	17
Nevada.....	338	284	2,755	1,834	27	24
Orange.....		298		3,275		27
Placer.....	193	148	1,584	2,498	17	18
Plumas.....	57	106	597	852	12	10
Sacramento.....	219	242	1,500	1,911	18	16
San Benito.....	162	158	813	897	16	14
San Bernardino.....	347	447	2,331	2,835	26	28
San Diego.....	622	484	3,562	4,768	37	36
San Francisco.....	846	356	22,795	25,052	57	65
San Joaquin.....	189	446	2,101	3,123	34	33
San Luis Obispo.....	359	375	1,489	1,779	21	22
San Mateo.....	182	218	822	964	9	10
Santa Barbara.....	316	172	2,768	784	22	21
Santa Clara.....	593	896	3,711	5,435	29	29
Santa Cruz.....	256	267	2,225	2,397	11	13
Shasta.....	363	395	3,268	2,789	32	31
Sierra.....	75	60	808	791	14	11
Siskiyou.....	243	149	1,469	1,468	29	37
Solano.....	284	381	1,192	1,726	20	18
Sonoma.....	671	634	4,338	5,287	27	31
Stanislaus.....	214	176	1,074	1,319	18	18
Sutter.....	111	115	923	1,092	20	18
Tehama.....	187	213	1,428	1,866	10	10
Trinity.....	55	56	367	453	4	4
Tulare.....	457	491	3,531	3,955	48	50
Tuolumne.....	106	107	913	818	4	4
Ventura.....	73	111	534	857	12	14
Yolo.....	99	119	1,110	1,042	16	17
Yuba.....	87	111	856	968	18	16
Totals.....	15,925	16,428	116,281	130,385	1,151	1,162

TABLE No. 2—Continued.

Teachers.

COUNTIES.	Number of Female Teachers.		Total Number of Teachers.		Number of Teachers Who are Graduates of the California State Normal School.	
	1889.	1890.	1889.	1890.	1889.	1890.
Alameda.....	261	268	305	315	38	48
Alpine.....	4	4	4	4	1	1
Amador.....	54	53	71	71	12	14
Butte.....	79	78	105	104	8	5
Calaveras.....	44	41	55	55	6	5
Colusa.....	45	50	84	86	4	5
Contra Costa.....	56	57	71	70	33	28
Del Norte.....	8	8	15	13	3	4
El Dorado.....	42	40	56	60	12	12
Fresno.....	98	112	144	162	29	35
Humboldt.....	78	76	133	123	21	17
Inyo.....	2	6	13	13	2	5
Kern.....	28	35	44	51	1	5
Lake.....	42	43	57	50	3	8
Lassen.....	20	20	32	33	3	2
Los Angeles.....	332	315	430	391	144	127
Marin.....	37	37	46	47	8	12
Mariposa.....	27	22	37	34	2	2
Mendocino.....	66	69	94	103	6	7
Merced.....	30	32	45	46	8	7
Modoc.....	20	23	38	38	3	2
Mono.....	7	7	10	10	3	2
Monterey.....	86	93	105	110	31	36
Napa.....	58	59	73	76	11	11
Nevada.....	55	57	82	81	10	9
Orange.....		43		70		27
Placer.....	53	51	70	69	21	31
Plumas.....	19	20	31	30	4	2
Sacramento.....	143	157	161	173	16	24
San Benito.....	34	37	50	51	8	11
San Bernardino.....	86	90	112	118	12	16
San Diego.....	144	163	181	199	32	38
San Francisco.....	781	794	838	859	69	65
San Joaquin.....	95	101	129	134	8	8
San Luis Obispo.....	84	90	105	112	18	33
San Mateo.....	41	41	50	51	7	6
Santa Barbara.....	59	61	81	82	9	9
Santa Clara.....	148	159	177	188	113	124
Santa Cruz.....	77	84	88	97	18	19
Shasta.....	64	69	96	100	3	5
Sierra.....	13	17	27	28	1	8
Siskiyou.....	33	31	62	68	6	10
Solano.....	72	75	92	93	20	30
Sonoma.....	160	163	187	194	14	21
Stanislaus.....	50	50	68	68	10	9
Sutter.....	23	24	43	42	7	8
Tehama.....	67	66	77	76	5	4
Trinity.....	14	14	18	18	2	3
Tulare.....	88	97	136	147	12	21
Tuolumne.....	31	32	35	36	3	2
Ventura.....	56	43	68	57	14	20
Yolo.....	57	59	73	76	1	
Yuba.....	33	36	51	52	5	3
Totals.....	4,104	4,272	5,255	5,434	840	966

TABLE No. 2—Continued.

Teachers.

COUNTIES.	Number of Teachers who are Graduates of any other State Normal School.		Number of Teachers holding Life Diplomas.		Number of Teachers holding State Edu- cational Diplomas.	
	1889.	1890.	1889.	1890.	1889.	1890.
Alameda.....	30	38	112	105	35	43
Alpine.....					1	1
Amador.....	10	10	15	19	13	15
Butte.....	4	4	27	28	42	44
Calaveras.....		1	13	12	7	5
Colusa.....	6	3	22	13	11	8
Contra Costa.....	1	4	10	16	2	4
Del Norte.....			3	3	2	
El Dorado.....	2	1	11	10	6	9
Fresno.....	9	15	21	28	15	24
Humboldt.....	8	11	38	35	12	14
Inyo.....			5	5	5	2
Kern.....	5		16	19	2	5
Lake.....	1	1	11	11	5	6
Lassen.....			9	4	3	9
Los Angeles.....	78	71	64	63	41	39
Marin.....	4	8	10	10	16	20
Mariposa.....			6	7	10	14
Mendocino.....	9	9	22	21	10	8
Merced.....	1		8	10	7	8
Modoc.....			10	11	5	8
Mono.....	1	2	2	2	3	4
Monterey.....	2	2	13	13	8	19
Napa.....	4	2	18	9	7	12
Nevada.....			20	24	21	22
Orange.....		20		18		3
Placer.....	3	3	16	12	14	11
Plumas.....	5	3	16	17	9	11
Sacramento.....		3	30	35	25	37
San Benito.....	1	1	7	7	9	9
San Bernardino.....	10	9	17	14	11	14
San Diego.....	34	35	27	31	19	16
San Francisco.....	17	20	333	333	170	169
San Joaquin.....	3	5	26	27	37	40
San Luis Obispo.....	2	5	12	12	7	12
San Mateo.....	2	1	8	7	11	6
Santa Barbara.....	11	8	18	22	13	12
Santa Clara.....	6	6	28	20	40	51
Santa Cruz.....	3	2	16	17	14	15
Shasta.....	7	5	20	22	9	11
Sierra.....			6	5	1	2
Siskiyou.....	4	2	6	15	3	4
Solano.....	3	6	35	30	20	15
Sonoma.....	10	10	35	27	29	34
Stanislaus.....		4	20	16	10	12
Sutter.....	1	2	10	9	3	5
Tehama.....	5	6	10	8	18	19
Trinity.....			2	2	4	4
Tulare.....	13	11	35	44	22	29
Tuolumne.....			8	6	5	2
Ventura.....	3	3	6	5	5	
Yolo.....			11	13	11	8
Yuba.....	2	2	9	12	16	17
Totals.....	321	354	1,253	1,264	824	911

TABLE No. 2—Continued.

Certificates.

COUNTIES.	Number of High and Grammar School Course Certificates.		Number of Grammar Grade Certificates.		Number of Primary Grade Certificates.	
	1889.	1890.	1889.	1890.	1889.	1890.
Alameda	15	45	238	237	52	50
Alpine		1	2	2	2	2
Amador	11	12	27	36	36	24
Butte	3	4	87	83	15	21
Calaveras			31	40	14	15
Colusa	8	13	46	42	30	33
Contra Costa	1	2	7	52	17	16
Del Norte			9	8	6	5
El Dorado	1	1	35	37	21	18
Fresno	4	7	101	111	43	56
Humboldt	4	10	86	75	47	48
Inyo		1	11	12	2	1
Kern			10	39	10	12
Lake	4	4	40	50	13	9
Lassen			21	24	11	9
Los Angeles	27	24	319	299	87	65
Marin	3	6	32	33	14	14
Mariposa	2	2	27	22	10	9
Mendocino		9	59	27	35	26
Merced			34	32	11	14
Modoc			11	10	9	7
Mono			8	7	1	3
Monterey	5	6	15	6	31	41
Napa	2	1	45	56	26	19
Nevada		8	68	66	14	15
Orange		6		53		11
Placer			6	4	10	8
Plumas	1	2	29	25	1	3
Sacramento		2	158	168	3	5
San Benito	3		26	31	21	20
San Bernardino			54	67	58	51
San Diego	7	6	103	83	72	73
San Francisco	36	50	612	638	179	149
San Joaquin	8	10	109	103	15	20
San Luis Obispo	8	10	11	6	47	62
San Mateo	6	6	36	37	8	8
Santa Barbara	18	11	41	47	31	28
Santa Clara	8	7	152	167	17	14
Santa Cruz	11	25	41	51	36	21
Shasta	1	7	30	73	26	27
Sierra		2	19	20	8	8
Siskiyou			25	20	18	17
Solano	10	8	60	73	32	12
Sonoma	16	22	109	116	62	56
Stanislaus	10	34	10	33	8	9
Sutter			29	30	14	12
Tehama	2	2	67	64	8	10
Trinity			9	13	9	5
Tulare	5	9	97	126	34	21
Tuolumne			13	20	22	6
Ventura		2	35	13	33	21
Yolo	3	4	49	52	24	24
Yuba			41	44	10	8
Totals	243	381	2,340	3,583	1,363	1,241

TABLE No. 2—Continued.

Teachers.

COUNTIES.	Number of Teachers who attended County Institutes.		Number of Teachers who subscribe for some Educational Journal.	
	1889.	1890.	1889.	1890.
Alameda	290	315	224	220
Alpine	*	*	1	4
Amador	61	67	12	15
Butte	103	98	85	90
Calaveras	48	46	39	39
Colusa	81	85	36	68
Contra Costa	60	70	50	52
Del Norte	*	*	7	10
El Dorado	41	54	27	23
Fresno	138	140	96	111
Humboldt	108	104	89	114
Inyo	*	*	10	13
Kern	39	40	40	36
Lake	46	45	†	37
Lassen	29	*	23	26
Los Angeles	410	390	367	353
Marin	46	47	40	44
Mariposa	25	23	12	20
Mendocino	71	103	33	99
Merced	44	46	35	33
Modoc	36	30	38	38
Mono	*	*	7	7
Monterey	102	109	85	90
Napa	65	71	60	41
Nevada	82	81	40	42
Orange		69		64
Placer	66	67	59	62
Plumas	27	34	21	23
Sacramento	135	167	30	12
San Benito	44	51	24	35
San Bernardino	110	115	62	72
San Diego	172	150	123	65
San Francisco	838	859	552	585
San Joaquin	110	121	120	100
San Luis Obispo	100	109	35	45
San Mateo	48	50	39	40
Santa Barbara	76	86	48	61
Santa Clara	172	187	128	158
Santa Cruz	87	*	73	80
Shasta	88	93	50	75
Sierra	*	*	20	26
Siskiyou	48	52	50	25
Solano	92	93	80	80
Sonoma	182	188	133	144
Stanislaus	66	67	40	14
Sutter	36	41	17	29
Tehama	77	76	49	54
Trinity	*	*	18	10
Tulare	134	150	78	140
Tuolumne	33	33	35	36
Ventura	26	49	28	47
Yolo	73	75	47	50
Yuba	46	49	26	37
Totals	4,811	4,995	3,441	3,794

* None held.

† No report.

TABLE No. 2—Continued.

Teachers' Certificates.

COUNTIES.	Number of Certificates Granted to Male Teachers.		Number of Certificates Granted to Female Teachers.		Number of Certificates Renewed.		Number of Applicants for Certificates Rejected.	
	1889.	1890.	1889.	1890.	1889.	1890.	1889.	1890.
Alameda	19	22	61	70	36	73	62	35
Alpine				3				
Amador	5	10	20	33		2	19	11
Butte	8	8	26	36	18	10	29	21
Calaveras	10	7	25	20	14	2	14	19
Colusa	8	10	13	14	5	23	26	16
Contra Costa	7	3	11	11	9	22		12
Del Norte	2	1	2	4	2	4	1	
El Dorado	8	8	21	18	3	2	12	6
Fresno	16	18	16	35			26	30
Humboldt	12	22	15	51	22	27	42	19
Inyo	1		1	5	2			1
Kern	6	2	5	10	5	4	9	11
Lake	6	4	21	50			17	8
Lassen	4	4	10	8		7	2	10
Los Angeles	59	49	184	104	58	138	131	79
Marin	4	6	21	21	3	12	8	7
Mariposa	16	2	9	13	2	2	1	2
Mendocino	11	13	22	29	33	30	32	1
Merced	7	3	14	8	15	9	12	11
Modoc	2	4		9			8	12
Mono	1			3	3	1		
Monterey	13	11	75	47	4	22	13	11
Napa	7	4	18	19	30	35	21	11
Nevada	5	5	21	29	14	12	22	13
Orange		4		10		3		32
Placer	3	2	8	7			8	4
Plumas	2	2	9	7	3	3	7	8
Sacramento	2	1	24	44	13	33	52	34
San Benito	2	1	9	19	12	7	15	9
San Bernardino	13	21	27	18	31	37	25	18
San Diego	10	19	44	52		14	59	54
San Francisco	20	22	135	173	86	215	185	42
San Joaquin	14	32	32	75	4	26	17	30
San Luis Obispo	10	11	33	41	6	25	26	38
San Mateo		1	13	12	17	23	4	3
Santa Barbara	13	7	30	17	21	25	10	12
Santa Clara	4	10	14	9	17	75	26	27
Santa Cruz	3	4	65	67	4	9	22	14
Shasta	17	9	18	41	9	20	25	25
Sierra	1		5	4	8	1	1	2
Siskiyou	3	7	10	3			20	20
Solano	13	13	35	50	9	21	16	14
Sonoma	17	21	66	64	44	64	51	38
Stanislaus	12	20	19	37	3	8	21	13
Sutter	11	6	18	14		5	12	10
Tehama	4	10	30	33			23	18
Trinity	1	5	8	8	5	1	4	1
Tulare	19	9	47	11	4	33	40	36
Tuolumne			9	9		10	5	8
Ventura	4	3	13	16	7	2	8	8
Yolo	9	2	19	17	10		16	29
Yuba	10	10	28	22	1	9		
Totals	454	468	1,379	1,530	592	1,106	1,205	893

TABLE No. 2—Continued.

Trustees Appointed.

COUNTIES.	Number of Trustees Appointed by County Superintendents.	
	1889.	1890.
Alameda.....	19	9
Alpine.....	3	3
Amador.....	27	19
Butte.....	38	37
Calaveras.....	21	36
Colusa.....	17	4
Contra Costa.....	24	20
Del Norte.....	3	3
El Dorado.....	8	6
Fresno.....	75	60
Humboldt.....	33	43
Inyo.....	6	7
Kern.....	21	11
Lake.....	23	27
Lassen.....	12	19
Los Angeles.....	124	103
Marin.....	34	42
Mariposa.....	15	18
Mendocino.....	18	15
Merced.....	80	73
Modoc.....	12	12
Mono.....		1
Monterey.....	50	70
Napa.....	37	61
Nevada.....	30	20
Orange.....		14
Placer.....	16	12
Plumas.....	18	21
Sacramento.....	6	5
San Benito.....	26	33
San Bernardino.....	56	22
San Diego.....	98	117
San Francisco.....		
San Joaquin.....	11	9
San Luis Obispo.....	68	59
San Mateo.....	18	13
Santa Barbara.....	16	24
Santa Clara.....	41	44
Santa Cruz.....	21	25
Shasta.....	23	41
Sierra.....	8	12
Siskiyou.....	20	24
Solano.....	27	30
Sonoma.....	84	86
Stanislaus.....	20	11
Sutter.....	24	28
Tehama.....	10	10
Trinity.....	7	6
Tulare.....	150	137
Tuolumne.....	5	7
Ventura.....	17	21
Yolo.....	15	
Yuba.....	25	20
Totals.....	1,560	1,550

TABLE No. 2—Continued.

Salaries.

COUNTIES.	Average Monthly Wages Paid to Male Teachers.		Average Monthly Wages Paid to Female Teachers.	
	1889.	1890.	1889.	1890.
Alameda.....	\$104 43	\$104 00	\$71 78	\$72 00
Alpine.....			60 00	60 25
Amador.....	70 00	75 00	58 00	58 00
Butte.....	82 30	81 50	65 40	67 00
Calaveras.....	76 00	73 42	56 50	57 86
Colusa.....	83 10	85 90	69 80	69 75
Contra Costa.....	84 00	86 00	66 00	74 00
Del Norte.....	59 28	68 00	60 00	58 57
El Dorado.....	68 00	66 00	59 00	55 40
Fresno.....	76 00	81 00	67 00	62 00
Humboldt.....	75 00	77 13	65 68	67 87
Inyo.....	80 00	82 50	85 00	75 55
Kern.....	82 66	77 50	69 12	74 00
Lake.....	68 66	74 00	58 50	59 25
Lassen.....	69 00	72 00	65 00	66 00
Los Angeles.....	88 55	92 17	75 36	80 64
Marin.....	89 44	87 50	63 37	64 30
Mariposa.....	71 00	71 66	68 00	68 18
Mendocino.....	68 92	76 94	61 28	59 73
Merced.....	73 00	70 00	68 00	69 00
Modoc.....	73 00	72 00	73 00	72 00
Mono.....	95 00	90 00	80 00	80 00
Monterey.....	71 84	76 32	61 25	62 23
Napa.....	71 07	76 16	57 00	59 50
Nevada.....	75 00	74 60	62 80	64 64
Orange.....		83 24		68 83
Placer.....	78 72	79 50	63 94	65 10
Plumas.....	80 00	78 00	60 80	65 00
Sacramento.....	91 00	105 00	67 00	65 00
San Benito.....	72 81	74 30	64 25	61 25
San Bernardino.....	83 00	92 00	66 75	70 00
San Diego.....	75 00	76 00	68 40	64 50
San Francisco.....	129 21	129 36	76 34	77 41
San Joaquin.....	85 00	90 00	70 00	70 00
San Luis Obispo.....	75 00	75 00	62 42	63 00
San Mateo.....	89 00	81 00	59 00	57 00
Santa Barbara.....	76 50	75 00	60 00	61 00
Santa Clara.....	92 50	89 00	64 47	69 65
Santa Cruz.....	95 45	88 88	56 88	56 96
Shasta.....	66 50	71 54	63 66	64 69
Sierra.....	82 14	85 00	66 54	65 00
Siskiyou.....	75 00	62 50	65 00	75 00
Solano.....	84 50	85 80	60 17	65 25
Sonoma.....	82 04	75 48	55 32	56 23
Stanislaus.....	67 00	81 50	67 00	65 00
Sutter.....	76 80	77 55	62 91	66 36
Tehama.....	85 20	85 00	67 00	68 65
Trinity.....	78 75	81 75	68 00	69 50
Tulare.....	81 50	82 55	70 00	72 55
Tuolumne.....	80 00	72 50	62 50	74 00
Ventura.....	80 75	75 00	64 25	63 00
Yolo.....	78 00	80 00	66 00	66 00
Yuba.....	71 40	73 00	61 40	65 00
Totals.....	\$78 23	\$80 70	\$65 13	\$66 20

TABLE No. 2- Continued.

Salaries.

COUNTIES.	Salary of County Superintendents.	
	1889.	1890.
Alameda.....	\$2,400 00	\$2,400 00
Alpine.....	100 00	100 00
Amador.....	600 00	600 00
Butte.....	1,800 00	1,800 00
Calaveras.....	500 00	500 00
Colusa.....	1,800 00	1,800 00
Contra Costa.....	1,800 00	1,800 00
Del Norte.....	400 00	400 00
El Dorado.....	1,500 00	1,500 00
Fresno.....	2,000 00	2,000 00
Humboldt.....	1,500 00	1,500 00
Inyo.....	400 00	400 00
Kern.....	1,200 00	1,200 00
Lake.....	800 00	800 00
Lassen.....	600 00	600 00
Los Angeles.....	2,000 00	2,000 00
Marin.....	1,650 00	1,650 00
Mariposa.....	650 00	650 00
Mendocino.....	1,500 00	1,500 00
Merced.....	1,200 00	1,200 00
Modoc.....	700 00	700 00
Mono.....	400 00	400 00
Monterey.....	1,650 00	1,650 00
Napa.....	900 00	900 00
Nevada.....	2,000 00	2,000 00
Orange.....		1,800 00
Placer.....	1,400 00	1,400 00
Plumas.....	600 00	600 00
Sacramento.....	1,800 00	1,800 00
San Benito.....	750 00	750 00
San Bernardino.....	1,200 00	1,200 00
San Diego.....	1,200 00	1,200 00
San Francisco.....	4,000 00	4,000 00
San Joaquin.....	2,000 00	2,000 00
San Luis Obispo.....	1,000 00	1,000 00
San Mateo.....	600 00	600 00
Santa Barbara.....	1,500 00	1,500 00
Santa Clara.....	2,000 00	2,000 00
Santa Cruz.....	800 00	800 00
Shasta.....	1,740 00	1,740 00
Sierra.....	625 00	625 00
Siskiyou.....	1,000 00	1,000 00
Solano.....	1,500 00	1,500 00
Sonoma.....	2,000 00	2,000 00
Stanislaus.....	1,200 00	1,200 00
Sutter.....	800 00	800 00
Tehama.....	2,000 00	2,000 00
Trinity.....	700 00	700 00
Tulare.....	2,000 00	2,000 00
Tuolumne.....	500 00	500 00
Ventura.....	800 00	800 00
Yolo.....	1,500 00	1,500 00
Yuba.....	1,000 00	1,000 00
Totals.....	\$66,265 00	\$68,065 00

TABLE No. 2—Continued.

COUNTIES.	Assessed Valuation of Taxable Property.	Rate of Tax per \$100.	Amount Received from Tax.
	1889.	1889.	1889.
Alameda	\$66,989,510 00	13 cents.	\$87,020 89
Alpine	275,869 00	50 cents.	1,332 64
Amador	4,422,487 00	23 cents.	10,101 41
Butte	19,333,701 00	19 cents.	36,756 16
Calaveras	4,224,060 00	34 cents.	13,788 51
Colusa	23,756,231 00	14.6 cents.	36,041 59
Contra Costa	14,871,203 00	15 cents.	22,644 18
Del Norte	1,871,560 00	18 cents.	3,574 40
El Dorado	3,708,044 00	32 cents.	11,774 00
Fresno	31,397,406 00	15 cents.	47,096 11
Humboldt	17,759,386 00	17.7 cents.	31,479 00
Inyo	1,518,677 00	27.6 cents.	4,024 78
Kern	11,100,000 00	23 cents.	23,218 53
Lake	3,683,031 00	28 cents.	10,225 46
Lassen	2,500,000 00	50 cents.	11,716 69
Los Angeles	102,259,506 00	12.6 cents.	119,959 00
Marin	10,981,946 00	12 cents.	13,250 73
Mariposa	1,879,980 00	20.56 cents.	8,971 26
Mendocino	11,289,904 00	23.6 cents.	25,405 95
Merced	14,917,870 00	13.5 cents.	19,788 06
Modoc	2,997,235 00	41 cents.	10,297 36
Mono	867,741 00	40 cents.	4,034 78
Monterey	13,931,330 00	23 cents.	34,828 37
Napa	14,437,325 00	16 cents.	23,013 55
Nevada	5,676,145 00	35.6 cents.	27,265 50
Orange	10,098,294 00	20 cents.	19,994 78
Placer	2,189,000 00	37 cents.	8,098 30
Plumas	32,798,615 00	8 cents.	26,416 44
Sacramento	6,023,800 00	26 cents.	15,479 12
San Benito	26,500,680 00	18 cents.	43,844 44
San Bernardino	41,521,508 00	21 cents.	79,902 93
San Diego	273,389,616 00	8.6 cents.	349,913 19
San Francisco	38,692,149 00	13 cents.	50,190 67
San Joaquin	14,000,000 00	18 cents.	25,181 10
San Luis Obispo	13,358,000 00	16 cents.	21,717 70
San Mateo	19,650,065 00	13.6 cents.	27,515 15
Santa Barbara	51,636,903 00	9 cents.	46,744 07
Santa Clara	10,704,389 00	20.6 cents.	21,793 49
Santa Cruz	6,529,246 00	50 cents.	31,330 72
Shasta	1,703,624 00	43 cents.	7,457 71
Sierra	1,669,968 00	32 cents.	21,468 42
Siskiyou	18,617,680 00	17 cents.	30,000 00
Solano	30,126,588 00	12 cents.	36,151 90
Sonoma	14,913,628 00	15 cents.	21,825 65
Stanislaus	9,832,456 00	15 cents.	15,275 49
Sutter	10,834,665 00	23 cents.	27,206 41
Tehama	1,142,979 00	40 cents.	4,578 80
Trinity	23,134,665 00	16 cents.	38,590 82
Tulare	2,500,000 00	33 cents.	7,650 00
Tuolumne	8,550,382 00	13 cents.	11,495 38
Ventura	19,300,000 00	11 cents.	21,296 85
Yolo	6,649,115 00	16 cents.	11,179 78
Yuba			
Totals	\$1,082,648,262 00		\$1,660,508 22

TABLE No. 2—Continued.

COUNTIES.	Assessed Valuation of Taxable Property.	Rate of Tax per \$100.	Amount Received from Tax.
	1890.	1890.	1890.
Alameda	\$69,865,401 00	11.50 cents.	\$80,587 60
Alpine	282,835 00	50 cents.	1,130 50
Amador	4,281,969 00	27 cents.	11,400 00
Butte	20,730,252 00	17 cents.	35,327 35
Calaveras	4,219,800 00	28 cents.	12,130 63
Colusa	23,642,737 00	13.8 cents.	33,311 70
Contra Costa	14,968,349 00	19 cents.	29,204 64
Del Norte	1,921,256 00	20 cents.	3,869 07
El Dorado	3,879,887 00	27 cents.	10,665 54
Fresno	34,626,100 00	15 cents.	51,939 27
Humboldt	18,445,272 00	16 cents.	29,282 00
Inyo	1,549,723 00	18.8 cents.	3,526 92
Kern	11,832,665 00	18 cents.	20,957 00
Lake	3,973,069 00	24 cents.	9,754 11
Lassen	2,537,885 00	40 cents.	9,914 16
Los Angeles	83,640,086 00	16 cents.	130,405 00
Marin	11,108,657 00	12.50 cents.	13,825 85
Mariposa	1,849,641 00	37.50 cents.	6,768 34
Mendocino	11,944,265 00	23.6 cents.	25,860 61
Merced	14,159,887 00	13.5 cents.	19,362 15
Modoc	2,992,901 00	28 cents.	8,059 01
Mono	941,010 00	30 cents.	2,835 14
Monterey	15,369,313 00	21 cents.	29,504 44
Napa	14,000,653 00	16 cents.	23,690 64
Nevada	5,600,800 00	35.6 cents.	28,621 60
Orange	9,049,095 00	20 cents.	18,098 19
Placer	10,118,060 00	22.8 cents.	25,420 50
Plumas	2,309,440 00	35 cents.	7,678 40
Sacramento	34,200,780 00	10 cents.	34,200 78
San Benito	6,155,405 00	27 cents.	17,047 82
San Bernardino	20,166,233 00	16 cents.	36,279 39
San Diego	31,560,820 00	23 cents.	69,330 48
San Francisco	306,041,440 00	12.93 cents.	398,766 10
San Joaquin	37,019,675 00	13 cents.	50,017 77
San Luis Obispo	14,576,647 00	21 cents.	33,898 21
San Mateo	13,636,840 00	13 cents.	18,496 57
Santa Barbara	15,420,314 00	16.8 cents.	26,921 60
Santa Clara	51,879,099 00	9 cents.	45,138 30
Santa Cruz	10,496,955 00	18.8 cents.	21,019 89
Shasta	6,598,003 00	40 cents.	26,875 72
Sierra	1,635,889 00	38 cents.	6,187 14
Siskiyou	6,950,000 00	30 cents.	20,828 74
Solano	18,989,267 00	16 cents.	35,347 45
Sonoma	31,222,671 00	12 cents.	36,795 21
Stanislaus	15,522,192 00	14 cents.	22,686 23
Sutter	9,905,649 00	15 cents.	15,336 47
Tehama	11,037,890 00	20 cents.	23,614 17
Trinity	1,153,344 00	38 cents.	4,770 00
Tulare	23,126,035 00	10 cents.	27,368 48
Tuolumne	2,716,465 00	33 cents.	8,280 10
Ventura	8,051,659 00	13.8 cents.	11,366 41
Yolo	19,706,408 00	11 cents.	22,943 20
Yuba	7,046,316 00	15 cents.	10,519 80
Totals	\$1,104,656,004 00	-----	\$1,707,166 39

TABLE No. 3.
Statement of Financial Statistics, showing the Receipts from all Sources of Revenue for the School Year ending June 30, 1889.

COUNTIES.	Balance on hand at beginning of School Year.	Cash Received from State Apportionment.	Cash Received from County Taxes.	Cash Received from City and District Taxes.	Cash Received from Miscellaneous Sources.	Total Receipts.
Alameda.....	\$53,587 10	\$198,420 55	\$86,159 80	\$113,881 73	\$26,978 85	\$479,028 03
Alpine.....	303 72	805 51	1,246 29			2,355 52
Amador.....	12,242 09	28,538 64	9,885 50		1,671 53	52,337 76
Butte.....	12,298 02	39,149 60	38,842 60	567 19	20 50	90,877 91
Calaveras.....	5,304 14	21,960 19	12,961 90	1,520 75	58 35	41,805 33
Colusa.....	7,154 54	30,503 54	35,819 50	2,224 00	131 82	75,833 40
Contra Costa.....	9,678 06	30,890 00	22,665 00	6,572 71	115 00	69,890 77
Del Norte.....	1,986 59	4,754 53	4,100 40	396 37		11,187 89
El Dorado.....	1,328 32	20,315 98	10,615 47			32,259 77
Fresno.....	10,058 98	57,345 88	46,887 11	48,378 04	868 85	208,038 86
Humboldt.....	8,295 22	52,249 20	31,479 00	4,670 01	37,034 50	133,727 93
Inyo.....	645 35	5,687 92	3,798 83	225 95		10,258 05
Kern.....	8,097 03	15,211 30	21,168 00	2,764 62	25 00	47,265 95
Lake.....	2,208 78	16,698 24	10,259 19			29,771 90
Lassen.....	1,633 41	9,215 99	11,716 69	605 69	508 89	26,274 98
Los Angeles.....	134,658 42	249,654 76	119,977 10	21,884 34	224,014 00	750,068 62
Marin.....	18,112 37	21,458 12	13,087 83	7,469 25	186 50	60,314 07
Mariposa.....	312 15	9,219 60	9,256 72	2,073 42		20,861 89
Mendocino.....	21,678 21	39,520 82	24,356 30	15,859 99		101,415 32
Merced.....	4,114 24	14,704 56	19,788 06	4,964 87	110 90	43,682 63
Modoc.....	720 92	13,469 75	10,297 36	212 00		24,700 03
Mono.....	762 62	2,976 48	4,614 78		300 00	8,633 88
Monterey.....	16,388 58	39,753 03	31,308 00	5,268 46	91,970 00	93,688 07
Napa.....	12,110 85	33,383 80	22,739 72	16,950 45	265 00	85,449 82
Nevada.....	10,292 65	44,014 00	27,265 50			81,572 15
Orange.....						
Placer.....	13,993 07	27,417 97	19,879 35	4,458 40	25	65,749 04
Plumas.....	46 80	9,731 91	8,088 30	1,500 00		19,367 01
Sacramento.....	33,095 99	71,389 97	27,841 23	45,162 60	3 00	177,482 79
San Benito.....	2,320 10	18,242 64	14,905 00	1,161 70	217 15	36,846 59
San Bernardino.....	83,382 68	55,064 88	43,844 44	72,413 82	170 00	254,875 82
San Diego.....	35,894 40	75,563 28	72,786 32	170,573 85	1,626 46	354,444 31
San Francisco.....	3,309 35	558,494 51		349,913 19	5,148 90	916,805 95
San Joaquin.....	48,542 80	51,050 50	44,038 00	39,553 11	3,984 00	187,168 41
San Luis Obispo.....	10,555 17	38,564 40	24,942 55	4,741 53	1,066 19	79,869 84

San Mateo	16,124 31	24,105 00	22,160 00	998 35	22,052 77	63,388 66
Santa Barbara	16,611 74	38,862 72	27,037 00	47,218 76	1,194 38	104,564 23
Santa Clara	38,431 10	104,921 60	45,997 00	14,044 52	10 00	237,762 84
Santa Cruz	13,600 90	40,419 85	21,536 85	4,417 24	8 40	89,612 12
Shasta	6,270 24	30,522 96	31,330 72	7,434 76	473 46	72,549 56
Sierra	3,610 94	10,324 08	7,434 76	21,906 97	100 00	21,843 24
Siskiyou	3,279 33	22,955 80	21,906 97	3,365 13	478 75	48,142 10
Solano	20,418 64	42,562 96	30,076 94	18,235 38	11 70	96,523 67
Sonoma	32,704 93	79,110 20	35,578 40	7,964 27	298 25	166,107 66
Stanislaus	4,083 38	22,464 00	21,825 65	5,245 81	32 75	56,349 00
Sutter	3,363 64	12,459 80	15,183 92	4,378 25	17 20	36,556 42
Tehama	16,824 61	25,030 64	26,782 05	24,313 61	418 72	73,048 30
Trinity	375 61	7,041 10	4,578 80	20,538 39	207 39	12,612 71
Tulare	8,626 65	54,250 56	38,590 82	1,750 72	6,500 00	126,200 36
Tuolumne	2,981 30	14,815 80	7,650 00	6,552 07	227 50	25,654 49
Ventura	30,043 70	21,285 74	11,526 74	\$1,153,180 54		83,394 57
Yolo	6,233 92	30,316 79	22,146 85			66,868 28
Yuba	3,766 16	20,710 70	11,208 79			42,465 22
Totals	\$810,918 82	\$2,507,483 35	\$1,289,074 10	\$1,153,180 54	\$337,006 91	\$6,097,663 72

TABLE No. 3—Continued.
Statement of Financial Statistics, showing the Receipts from all sources for the School Year ending June 30, 1890.

COUNTIES.	Balance on hand at beginning of School Year.	Cash Received from State Apportionment.	Cash Received from County Taxes.	Cash Received from City and District Taxes.	Cash Received from Miscellaneous Sources.	Total Receipts.
Alameda	\$117,400 46	\$210,051 10	\$82,965 78	\$90,592 89	\$21,516 92	\$522,527 15
Alpine	178 25	842 02	1,322 29	-----	10 00	2,352 56
Amador	8,388 82	27,704 90	10,578 80	-----	535 82	47,208 34
Butte	22,145 92	40,577 00	35,804 78	4,231 08	94 00	102,852 78
Calaveras	7,266 26	23,194 39	12,172 60	-----	112 29	42,745 94
Colusa	13,376 23	31,440 15	33,311 70	4,175 88	234 00	82,537 96
Contra Costa	14,144 85	32,368 00	28,714 00	19,438 50	107 00	94,772 35
Del Norte	3,237 49	4,610 18	3,799 95	885 76	-----	12,533 38
El Dorado	3,482 97	19,360 05	10,497 24	4,010 00	-----	37,320 26
Fresno	22,307 37	61,191 62	50,999 11	39,675 31	121 14	174,294 55
Humboldt	45,891 87	56,239 95	29,282 00	26,983 26	59 99	158,457 07
Inyo	859 77	5,815 95	3,526 92	12,259 00	50 00	22,511 64
Kern	19,300 37	16,880 00	22,817 00	4,704 33	-----	63,701 70
Lake	3,331 98	18,085 59	9,754 11	2,436 82	13 00	33,621 50
Lassen	2,380 44	9,646 45	9,914 16	2,993 10	22 00	24,956 15
Los Angeles	93,783 50	221,013 44	133,787 47	-----	28,411 11	476,995 92
Marin	13,319 07	24,322 41	13,792 56	4,254 63	168 25	55,856 92
Mariposa	492 75	9,237 09	6,789 96	997 80	-----	17,497 60
Mendocino	22,745 85	40,858 35	27,042 76	2,200 24	-----	92,847 00
Merced	9,081 21	15,442 35	19,362 15	1,036 24	77 75	44,990 70
Modoc	1,075 58	13,622 59	7,959 01	86 30	1,745 53	24,489 01
Mono	657 64	2,893 65	2,817 14	-----	2,228 07	8,596 50
Monterey	20,775 40	39,725 55	35,466 00	9,008 85	686 51	105,657 31
Napa	27,069 70	33,885 80	23,690 64	1,460 23	428 70	86,535 07
Nevada	16,804 30	41,242 85	28,621 60	-----	55 90	86,724 65
Orange	19,361 35	39,892 00	16,710 40	8,706 85	619 64	85,250 24
Placer	9,210 17	28,326 75	25,313 26	-----	736 45	63,586 63
Plumas	230 87	9,587 60	7,612 73	-----	141 00	17,672 20
Sacramento	51,518 22	70,698 35	33,542 45	41,996 73	310 70	197,976 45
San Benito	4,840 10	19,071 35	16,566 00	810 01	843 75	42,131 21
San Bernardino	42,365 57	57,204 50	36,007 47	33,073 14	307 94	168,958 62
San Diego	95,421 01	79,461 45	67,680 30	67,154 28	260 52	309,957 56
San Francisco	222 22	578,696 77	398,706 10	-----	5,619 55	983,304 64
San Joaquin	62,306 75	64,262 00	51,678 00	22,865 29	3,874 00	204,986 04
San Luis Obispo	5,533 36	42,382 25	33,300 00	12,596 49	10 00	93,822 10

San Mateo	23,506 75	24,013 00	18,717 10	8,396 50	1,020 00	75,653 35
Santa Barbara	23,768 78	42,840 00	27,791 45	805 43	20,903 30	116,108 96
Santa Clara	65,676 97	113,492 00	48,013 00	25,650 54	1,188 95	254,021 46
Santa Cruz	29,123 71	45,689 55	20,842 01	8,553 33	635 50	104,904 10
Shasta	14,508 93	30,948 80	26,875 72	7,232 37	364 13	79,989 95
Sierra	4,121 12	10,151 65	6,148 52	799 06	466 25	21,686 60
Siskiyou	6,664 90	25,501 50	20,828 74			52,995 14
Solano	24,513 18	43,348 45	35,347 45	6,442 90	121 71	109,773 69
Sonoma	37,870 93	81,720 95	37,144 42	23,132 16	933 80	180,802 26
Stanislaus	8,118 04	22,900 80	22,472 59	14,828 34	242 50	68,562 27
Sutter	3,796 99	12,682 42	15,582 28	1,468 79	11 00	33,541 48
Tehama	10,190 74	26,514 92	23,027 70	11,917 50	778 25	72,429 11
Trinity	1,683 81	7,221 44	4,770 00		171 00	13,846 25
Tulare	24,987 22	57,901 65	27,368 48	19,190 72	1,260 48	130,708 55
Tuolumne	4,020 60	15,200 99	8,068 00		1,60 00	27,349 59
Ventura	17,008 09	24,035 68	11,283 45	13,464 20		65,791 42
Yolo	12,745 02	32,525 49	22,943 20	6,511 58	12 15	74,737 44
Yuba	6,730 85	21,076 85	10,519 80	6,584 17	461 67	45,373 34
Totals	\$1,099,514 30	\$2,627,470 59	\$1,320,904 25	\$972,431 50	\$98,062 22	\$6,118,412 86

TABLE No. 4.

Statement of Financial Statistics, showing School Expenditures for the School Year ending June 30, 1889.

COUNTIES.	Amount Paid for Teachers' Salaries.	Amount Paid for Rents, Repairs, Fuel, and Outing Expenses.	Amount Paid for School Libraries.	Amount Paid for School Apparatus.	Total Current Expenses.	Amount Paid for Sites, Buildings, and School Furniture.	Total Expenditures.	Total Receipts.	Balance on Hand at Close of School Year.
Alameda.	\$261,491 61	\$73,052 13	\$2,528 99	\$1,658 74	\$338,731 47	\$18,701 16	\$357,432 63	\$479,028 03	\$121,595 40
Alpine.	1,874 70	227 72	21 85	35 50	2,159 77		2,159 77	2,355 52	135 75
Amador.	28,802 25	4,288 86	752 28	926 65	34,770 04	9,078 90	43,848 94	52,337 76	8,488 82
Butte.	57,350 00	8,093 82	1,725 36	252 58	67,421 75	1,016 74	68,438 49	90,877 91	22,439 42
Calaveras.	27,261 33	2,949 44	1,276 46	404 21	31,911 44	2,610 32	34,521 76	41,805 33	7,283 57
Colusa.	51,341 59	9,271 71	1,292 64	349 96	62,255 80	1,70 45	62,426 25	75,833 40	13,407 15
Contra Costa.	42,548 29	6,694 14	1,569 81	273 72	51,115 96	4,569 96	55,675 92	69,820 77	14,144 85
Del Norte.	6,246 00	1,060 71	214 52	23 50	7,564 73		7,564 73	11,187 89	3,623 16
El Dorado.	23,936 42	3,049 64	807 61	634 87	28,428 54	372 10	28,800 64	32,259 77	3,450 13
Fresno.	79,876 25	15,559 81	1,828 85	2,080 93	99,345 84	94,542 05	193,887 89	208,038 86	14,150 97
Humboldt.	67,188 27	7,758 91	2,482 46	738 80	78,168 44	9,339 35	87,507 79	133,727 93	46,220 14
Inyo.	7,942 63	757 19	282 58	219 94	9,202 34	55 00	9,257 34	10,258 05	1,000 71
Kern.	24,951 12	6,404 53	679 42	173 60	32,208 67	3,524 99	35,733 66	47,265 95	11,532 29
Lake.	21,903 51	1,491 29	809 69	574 20	24,578 69	1,813 14	26,391 83	29,771 90	3,380 07
Lassen.	16,568 00	2,135 01	448 73	348 85	19,500 59	4,110 56	23,611 15	26,274 98	2,663 83
Los Angeles.	324,688 66	50,581 05	4,039 77	1,109 72	380,419 20	262,148 83	642,568 03	750,068 62	107,500 59
Marin.	29,200 44	5,472 53	969 99	493 65	36,186 61	10,500 85	46,687 46	60,314 07	13,626 61
Mariposa.	14,806 06	1,951 05	108 29	908 16	17,773 56	2,546 61	20,320 17	20,861 89	541 72
Mendocino.	48,190 16	8,133 04	508 88	508 88	56,077 50	21,286 62	77,364 12	101,415 32	24,051 20
Merced.	25,690 93	4,382 42	352 63	776 90	31,211 88	2,975 35	34,187 81	43,682 63	9,494 82
Motoc.	19,206 04	3,056 40	669 18	318 74	23,250 36	212 00	23,462 36	24,700 03	1,237 67
Mono.	6,609 84	1,125 64	280 76		7,936 24		7,936 24	8,653 88	657 64
Monterey.	56,820 59	7,027 49	2,782 42	216 49	66,846 99	5,944 27	72,791 26	93,688 07	20,896 81
Napa.	39,971 95	6,048 55	703 96	277 30	47,001 76	11,082 36	58,084 12	85,449 82	27,365 70
Nevada.	51,693 75	11,121 23	1,141 10	671 84	64,627 92	183 75	64,811 67	81,572 15	16,760 48
Orange.									
Placer.	37,528 16	5,463 79	1,613 13	274 95	44,880 03	11,216 93	56,096 96	65,749 04	9,652 08
Plumas.	15,460 00	1,613 10	263 99	303 30	17,640 39	1,500 00	19,140 39	19,367 01	226 62
Sacramento.	101,430 91	20,536 49	1,427 79	1,191 01	124,586 20	1,643 16	126,229 36	177,452 79	51,253 43
San Benito.	26,125 61	3,508 79	789 91	138 65	30,562 96	1,272 46	31,835 42	36,846 59	5,011 17
San Bernardino.	63,229 23	11,648 23	1,533 77	686 79	77,150 02	135,360 23	212,510 25	254,875 82	42,365 57
San Diego.	109,190 73	38,536 53	2,317 58	1,857 34	151,902 18	95,894 58	247,796 76	354,444 31	106,647 55
San Francisco.	728,895 45	138,706 70	2,317 58	1,218 75	867,831 41	48,812 92	916,643 73	916,865 95	222 22
San Joaquin.	85,030 04	21,743 04	1,010 47	1,228 43	109,011 98	15,615 26	124,627 73	187,168 41	62,540 68

San Luis Obispo	55,334 88	5,370 94	1,626 36	567 13	62,899 31	11,231 42	74,180 73	79,863 84	5,639 11
San Mateo	31,390 94	5,568 78	1,424 82	547 56	37,932 10	37,932 10	38,867 75	63,388 66	24,520 91
Santa Barbara	44,978 25	11,516 34	1,593 07	1,432 15	59,519 81	21,275 64	80,795 45	104,564 23	23,768 78
Santa Clara	114,942 82	28,554 86	1,832 88	1,737 23	147,117 79	24,968 08	172,085 87	237,762 84	65,676 97
Santa Cruz	48,945 00	7,389 35	810 75	397 45	57,542 55	2,940 70	60,483 25	89,612 12	20,128 87
Shasta	45,411 25	6,378 70	1,680 61	458 90	53,929 46	4,111 17	58,040 63	72,549 56	14,508 93
Sierra	14,578 06	1,908 54	1,316 25	453 93	17,256 78	465 34	17,722 12	21,843 24	4,121 12
Siskiyou	36,852 00	2,671 77	1,132 99	767 44	41,424 20	-----	41,424 20	48,142 10	6,717 90
Solano	57,060 85	11,446 88	1,016 79	287 35	69,811 87	2,331 62	72,143 49	96,523 67	24,390 18
Sonoma	14,625 26	14,625 26	3,145 73	1,761 28	117,889 12	10,207 57	128,096 69	168,107 66	38,010 97
Stanislaus	98,356 85	14,625 26	720 88	613 66	44,192 87	3,948 20	48,141 07	56,349 00	8,207 95
Sutter	36,498 81	6,359 52	567 01	397 11	27,332 77	4,880 57	32,213 34	36,556 42	4,343 08
Tehama	22,656 82	3,711 83	916 35	318 14	48,408 30	14,407 88	62,816 18	73,048 30	10,232 12
Trinity	41,151 61	6,022 20	369 46	257 15	10,928 90	-----	10,928 90	12,612 71	1,683 81
Tulare	9,009 75	1,292 54	1,428 42	257 15	90,217 53	10,912 28	101,129 81	126,200 36	25,070 55
Tuolumne	72,988 21	13,100 80	788 84	2,700 10	90,217 53	811 73	21,063 19	26,634 49	4,591 30
Ventura	17,111 43	1,909 93	788 84	441 26	20,251 46	37,944 25	66,537 78	83,394 57	17,056 79
Yolo	24,113 73	2,872 10	585 87	821 83	28,393 53	3,976 39	54,248 26	66,968 28	12,720 02
Yuba	42,438 12	6,721 96	1,113 79	-----	50,271 87	2,058 56	35,734 37	42,465 22	6,730 85
	26,294 90	6,187 67	1,088 04	105 20	33,675 81	-----	-----	-----	-----
Totals	\$3,343,191 80	\$624,810 95	\$59,522 72	\$33,791 82	\$4,061,317 29	\$835,548 42	\$4,996,865 71	\$6,097,663 72	\$1,100,798 01

TABLE No. 4—Continued.
Statement of Financial Statistics, showing School Expenditures for the School Year ending June 30, 1890.

COUNTIES.	Amount Paid for Teachers' Salaries.	Amount Paid for Rents, Repairs, Fuel, and Contingent Expenses.	Amount Paid for School Libraries.	Amount Paid for School Apparatus.	Total Current Expenses.	Amount Paid for Sites, Buildings, and School Furniture.	Total Expenditures.	Total Receipts.	Balance on Hand at Close of School Year.
Alameda	\$276,980 81	\$77,587 85	\$1,926 69	\$1,831 26	\$358,326 61	\$81,361 74	\$439,688 35	\$522,527 15	\$82,838 80
Alpine	1,776 00	223 97	79 80	55 27	2,135 04	48 07	2,183 11	2,352 56	169 45
Amador	30,097 00	5,668 06	739 80	764 46	37,228 57	809 68	38,038 25	47,208 54	9,170 09
Butte	58,798 90	13,774 50	1,948 92	110 39	74,632 71	1,856 98	76,488 69	102,852 78	26,364 09
Calaveras	27,469 91	4,196 23	1,202 68	533 62	34,402 44	1,403 43	34,805 87	42,745 54	7,939 67
Colusa	52,167 28	10,094 49	1,569 90	96 00	63,927 67	5,335 28	69,262 95	82,537 96	13,275 01
Contra Costa	43,743 65	7,717 37	1,028 96	902 80	53,392 78	13,401 99	66,794 77	94,772 36	27,977 58
Del Norte	6,410 00	1,237 20	177 84	24 50	7,849 54	744 38	8,593 92	12,533 38	3,939 46
El Dorado	24,710 06	3,686 56	855 53	1,229 64	30,480 79	423 32	30,904 11	37,320 26	6,416 15
Fresno	93,782 00	19,309 55	1,186 05	4,079 95	118,356 55	39,115 00	157,471 55	174,294 55	16,823 00
Humboldt	74,277 57	13,257 97	2,416 30	575 69	90,527 53	46,244 25	136,771 78	158,457 07	21,685 29
Inyo	7,685 80	918 58	336 30	42 31	8,982 99	11,855 74	20,838 73	22,511 64	1,672 91
Kern	23,760 79	5,168 50	1,270 04	485 39	36,684 72	13,433 07	50,117 79	63,701 70	13,583 91
Lake	22,991 17	2,538 83	1,686 17	76 32	27,292 49	1,801 25	29,093 74	33,621 50	4,527 76
Lassen	16,522 13	2,224 89	337 02	324 63	19,408 17	3,316 63	22,724 80	24,956 15	2,231 35
Los Angeles	311,117 21	36,430 26	4,130 84	1,418 84	353,097 15	76,725 68	429,822 83	476,995 52	47,172 69
Marin	28,597 47	6,243 17	1,056 42	242 53	36,139 66	716 09	36,855 68	55,856 92	19,001 24
Mariposa	13,501 35	2,225 26	225 26	498 50	15,449 70	1,353 20	16,803 90	17,497 60	688 70
Mendocino	53,248 00	8,387 67	1,628 96	1,353 77	64,618 40	12,212 11	76,830 51	92,847 00	16,016 49
Merced	25,872 75	7,954 97	952 77	986 37	35,767 19	917 41	36,684 60	44,989 70	8,315 10
Modoc	17,963 58	2,519 51	556 39	285 37	21,324 85	1,831 83	23,156 68	24,489 01	1,332 33
Mono	6,588 71	877 33	200 68	47 35	7,114 07	186 00	7,300 07	8,596 50	636 43
Monterey	61,024 70	9,558 03	2,405 04	298 50	73,286 27	10,055 95	83,342 22	105,657 31	22,315 09
Napa	42,047 45	10,732 91	864 41	1,460 07	55,104 84	11,495 00	66,599 84	86,535 07	19,935 23
Nevada	48,915 00	9,887 62	1,971 76	1,267 13	62,041 51	3,919 60	65,961 11	86,724 65	20,763 54
Orange	46,094 22	10,523 05	1,002 35	213 50	57,833 12	6,470 84	64,303 96	85,250 24	20,946 28
Placer	33,221 89	7,662 50	1,794 27	169 50	43,839 16	258 99	44,098 15	63,586 63	14,488 48
Plumas	13,868 00	2,702 33	250 64	474 83	17,295 80	2,094 80	19,390 60	17,572 20	276 40
Sacramento	105,071 00	25,831 54	1,651 95	1,059 36	133,493 85	22,094 80	155,588 65	197,976 45	42,387 80
San Benito	26,255 85	4,684 88	895 07	512 38	32,348 18	1,547 50	33,895 68	42,131 21	8,235 53
San Bernardino	75,022 84	18,803 33	2,759 27	895 47	97,480 91	48,374 26	145,855 17	168,958 62	23,103 45
San Diego	121,525 34	30,808 55	4,094 61	989 78	157,418 28	76,779 65	234,197 93	303,957 56	75,759 63
San Francisco	823,918 39	134,725 51	1,031 48	1,830 82	961,506 20	21,507 90	983,014 10	983,304 64	290 54
San Joaquin	87,895 77	25,066 04	2,201 27	726 90	115,889 98	21,310 33	137,200 31	204,986 04	67,785 73

San Luis Obispo	59,495 99	5,775 21	2,018 13	731 02	68,020 85	14,913 79	82,934 14	93,822 10	10,887 96
San Mateo	31,812 51	10,838 50	301 42	182 63	48,735 06	8,761 50	52,496 56	73,653 35	23,156 79
Santa Barbara	50,247 50	12,440 16	964 96	1,045 45	64,728 07	15,395 06	80,123 13	116,108 96	55,985 83
Santa Clara	125,994 70	34,962 95	1,825 21	1,909 76	164,692 62	20,695 46	185,388 08	254,021 46	68,633 38
Santa Cruz	52,881 65	10,595 50	908 05	1,513 10	65,898 30	10,500 00	76,398 30	104,904 10	28,505 80
Shasta	48,285 00	10,063 38	1,795 88	1,338 23	61,482 49	7,256 61	68,739 10	79,989 95	11,250 85
Sierra	14,683 66	1,933 46	436 26	197 04	17,250 42	538 50	17,788 92	21,686 60	3,897 68
Siskiyou	37,494 00	3,560 24	961 54	672 95	42,688 73	-----	42,688 73	52,995 14	10,306 41
Solano	58,574 58	16,822 26	1,684 94	761 31	77,843 09	1,346 01	79,189 10	109,773 69	30,584 59
Sonoma	25,309 09	25,309 09	3,009 58	2,184 97	128,794 50	9,402 79	138,197 29	180,802 26	42,604 97
Stanislaus	8,058 45	8,058 45	880 63	911 50	49,156 08	391 78	49,547 86	68,362 27	19,014 41
Sutter	22,202 65	4,778 36	984 58	93 21	28,058 80	473 98	28,532 78	33,541 48	5,008 70
Tehama	41,313 81	7,112 12	1,643 55	501 94	50,571 42	12,792 59	63,364 01	72,429 11	9,065 10
Trinity	9,266 50	2,205 28	282 69	46 00	11,800 47	-----	11,800 47	13,846 25	2,045 78
Tulare	75,372 14	12,640 67	2,467 30	1,793 07	92,273 18	29,565 38	121,838 56	130,708 55	8,869 99
Tuolumne	18,071 62	2,828 13	671 37	597 33	22,168 45	-----	22,168 45	27,549 59	5,181 14
Ventura	27,743 44	3,823 06	981 76	608 13	33,156 39	18,300 92	51,457 31	65,791 42	14,354 11
Yolo	42,297 85	7,436 35	1,383 61	713 75	51,831 57	10,297 46	62,129 03	74,737 44	12,698 41
Yuba	26,332 42	3,585 11	1,016 79	786 93	31,721 25	4,403 01	36,124 26	45,373 34	9,249 08
Totals	\$3,594,588 98	\$706,995 12	\$71,121 94	\$42,442 85	\$4,415,148 89	\$703,947 79	\$5,119,096 68	\$6,115,412 86	\$989,316 18

TABLE No. 5.
Valuation of School Property, 1889.

COUNTIES.	Valuation of Lots, School Houses, and Furniture.	Valuation of School Libraries.	Valuation of School Apparatus.	Total Valua- tion of School Property.	Number of Volumes in School Library.
Alameda	\$725,411 00	\$18,350 00	\$12,495 00	\$756,256 00	21,158
Alpine	2,400 00	296 00	259 00	2,955 00	147
Amador	56,195 00	5,859 00	5,294 00	67,348 00	3,525
Butte	169,900 00	16,675 00	6,655 00	183,230 00	11,152
Calaveras	32,625 00	7,550 00	2,718 00	42,893 00	6,680
Colusa	132,280 00	12,725 00	4,950 00	149,955 00	10,552
Contra Costa	86,489 00	12,031 00	3,445 00	101,965 00	14,229
Del Norte	10,883 00	1,539 00	344 00	12,766 00	1,049
El Dorado	40,656 00	7,382 00	4,443 00	52,481 00	8,048
Fresno	346,930 00	23,822 00	10,670 00	381,422 00	7,801
Humboldt	127,000 00	13,235 00	4,440 00	144,675 00	14,395
Inyo	15,850 00	2,380 00	967 00	19,197 00	1,444
Kern	45,900 00	4,825 00	2,400 00	53,125 00	4,499
Lake	41,589 00	6,594 00	2,415 00	50,598 00	5,886
Lassen	19,690 00	2,489 00	1,285 00	23,464 00	1,963
Los Angeles	1,246,615 00	31,520 00	16,071 00	1,294,206 00	28,721
Marin	74,655 00	7,960 00	2,510 00	85,125 00	9,390
Mariposa	20,666 00	4,313 00	2,417 00	27,396 00	2,943
Mendocino	83,707 00	12,616 00	4,950 00	101,273 00	12,154
Merced	57,620 00	4,315 00	1,810 00	63,745 00	4,487
Modoc	34,166 00	5,149 00	2,550 00	41,845 00	3,276
Mono	13,000 00	1,800 00	890 00	15,690 00	1,811
Monterey	95,574 00	15,786 00	5,543 00	116,903 00	12,505
Napa	88,000 00	7,420 00	2,605 00	98,025 00	7,925
Nevada	113,122 00	12,280 00	4,775 00	130,177 00	10,749
Orange	78,140 00	11,915 00	4,925 00	94,980 00	8,725
Placer	19,950 00	5,015 00	2,255 00	27,220 00	4,300
Plumas	325,243 00	16,450 00	6,589 00	348,282 00	15,344
Sacramento	42,500 00	7,475 00	2,985 00	52,960 00	6,275
San Benito	436,515 00	11,660 00	5,520 00	453,695 00	9,522
San Bernardino	293,148 00	11,021 00	6,374 00	310,543 00	10,932
San Diego	4,742,200 00	4,980 00	25,000 00	4,772,180 00	19,132
San Francisco					

San Joaquin.....	297,084 00	15,087 00	11,465 00	323,636 00	11,153
San Luis Obispo.....	105,725 00	10,852 00	5,116 00	121,693 00	10,002
San Mateo.....	82,090 00	7,685 00	3,960 00	93,735 00	9,700
Santa Barbara.....	140,050 00	10,005 00	5,605 00	155,660 00	8,418
Santa Clara.....	432,200 00	25,972 00	16,527 00	474,699 00	16,941
Santa Cruz.....	120,155 00	10,995 00	5,440 00	136,570 00	10,750
Shasta.....	62,085 00	11,559 00	5,683 00	79,327 00	7,098
Sierra.....	27,180 00	4,525 00	2,195 00	33,900 00	2,722
Siskiyou.....	71,225 00	11,550 00	4,630 00	87,405 00	7,102
Solano.....	156,633 00	15,988 00	7,502 00	180,103 00	12,059
Sonoma.....	218,042 00	32,304 00	12,546 00	262,892 00	22,608
Stanislaus.....	87,785 00	7,290 00	2,180 00	97,255 00	6,220
Sutter.....	61,135 00	6,259 00	2,910 00	70,304 00	5,017
Tehama.....	107,350 00	13,240 00	4,560 00	125,150 00	8,351
Trinity.....	14,750 00	3,450 90	1,238 00	19,438 00	2,116
Tulare.....	188,400 00	19,275 00	10,350 00	218,005 00	11,915
Tuolumne.....	21,860 00	5,975 00	2,913 00	30,748 00	5,507
Ventura.....	94,750 00	3,520 00	2,405 00	100,675 00	4,225
Yolo.....	97,150 00	10,080 00	3,045 00	110,275 00	9,880
Yuba.....	37,050 00	7,810 00	1,895 00	46,755 00	7,725
Totals.....	\$12,031,278 00	\$540,828 00	\$272,684 00	\$12,884,770 00	460,298

TABLE No. 5—Continued.
Valuation of School Property, 1890.

COUNTIES.	Valuation of Lots, School Houses, and Furniture.	Valuation of School Libraries.	Valuation of School Apparatus.	Total Valua- tion of School Property.	Number of Volumes in School Library.
Alameda	\$810,730 00	\$19,645 00	\$13,985 00	\$844,360 00	25,692
Alpine	2,400 00	258 00	175 00	2,833 00	180
Amador	58,568 00	6,413 00	6,020 00	71,001 00	3,623
Butte	167,250 00	18,050 00	6,680 00	191,980 00	13,062
Calaveras	32,785 00	7,735 00	3,075 00	43,595 00	6,790
Colusa	133,810 00	14,273 00	5,023 00	153,106 00	12,115
Contra Costa	109,894 00	13,335 00	4,204 00	127,533 00	10,951
Del Norte	10,904 00	1,606 00	419 00	12,929 00	1,213
El Dorado	42,020 00	7,805 00	5,285 00	55,110 00	8,240
Fresno	285,770 00	27,160 00	14,493 00	327,423 00	9,044
Humboldt	199,075 00	15,460 00	5,280 00	219,815 00	15,365
Inyo	27,400 00	2,240 00	650 00	30,290 00	1,400
Kern	59,050 00	5,270 00	2,415 00	66,735 00	4,889
Lake	41,838 00	7,263 00	2,374 00	51,475 00	7,139
Lassen	22,705 00	3,062 00	1,625 00	27,392 00	2,343
Los Angeles	1,341,290 00	24,675 00	15,530 00	1,381,435 00	24,073
Marin	75,675 00	8,850 00	2,810 00	87,335 00	11,044
Mariposa	22,625 00	4,168 00	2,534 00	29,327 00	3,239
Mendocino	98,316 00	14,387 00	6,195 00	118,898 00	13,122
Merced	58,220 00	4,631 00	2,280 00	65,131 00	5,508
Modoc	31,020 00	4,869 00	2,223 00	38,112 00	3,354
Mono	11,700 00	2,300 00	920 00	14,920 00	1,773
Monterey	99,200 00	15,334 00	4,700 00	119,234 00	14,873
Napa	102,700 00	7,010 00	3,220 00	112,930 00	8,890
Nevada	119,700 00	12,340 00	5,640 00	137,680 00	11,105
Orange	130,555 00	10,010 00	2,971 00	143,536 00	8,867
Placer	75,320 00	12,160 00	4,760 00	92,240 00	9,817
Plumas	14,550 00	4,270 00	2,185 00	21,005 00	3,615
Sacramento	341,665 00	17,116 00	7,391 00	366,172 00	16,109
San Benito	44,500 00	7,750 00	3,420 00	55,670 00	7,191
San Bernardino	482,315 00	12,750 00	5,550 00	500,615 00	10,951
San Diego	407,676 00	16,158 00	8,649 00	432,483 00	15,260
San Francisco	4,726,600 00	7,294 00	23,830 00	4,757,724 00	18,689
San Joaquin	325,911 00	14,987 00	11,470 00	352,368 00	14,098

San Luis Obispo	115,025 00	12,300 00	5,498 00	132,823 00	11,563
San Mateo	93,655 00	8,625 00	4,260 00	106,540 00	10,167
Santa Barbara	143,300 00	10,080 00	5,790 00	159,110 00	8,936
Santa Clara	445,400 00	26,790 00	18,170 00	490,360 00	17,799
Santa Cruz	127,700 00	10,655 00	6,210 00	144,565 00	11,516
Shasta	73,200 00	12,615 00	6,595 00	92,410 00	8,282
Sierra	28,550 00	4,950 00	2,370 00	35,870 00	3,160
Siskiyou	71,775 00	12,060 00	5,175 00	89,010 00	8,095
Solano	158,035 00	17,525 00	8,545 00	184,105 00	13,097
Sonoma	227,549 00	33,542 00	13,266 00	274,357 00	24,376
Stanislaus	88,085 00	6,420 00	1,625 00	96,130 00	6,733
Sutter	63,585 00	7,137 00	2,780 00	73,502 00	5,820
Tehama	109,575 00	14,430 00	4,900 00	128,925 00	9,228
Trinity	14,090 00	3,475 00	1,255 00	18,820 00	2,266
Tulare	209,500 00	20,800 00	11,945 00	242,245 00	12,388
Tuolumne	21,430 00	6,860 00	3,460 00	31,750 00	5,573
Ventura	102,050 00	2,955 00	2,850 00	107,855 00	4,535
Yolo	102,202 00	9,321 00	3,210 00	114,733 00	10,079
Yuba	37,825 00	8,415 00	2,351 00	48,591 00	8,125
Totals	\$12,746,308 00	\$579,659 00	\$298,176 00	\$13,624,143 00	505,392

TABLE No. 6.

Statement by Counties of Apportionment of State School Moneys for the School Years Ending June 30, 1889, and June 30, 1890.

COUNTIES.	Semi-Annual.		Total for 1889.	Semi-Annual.		Total for 1890.
	August, 1888.	February, 1889.		August, 1889.	February, 1890.	
Alameda	\$33,128 16	\$165,640 80	\$198,768 96	\$36,510 04	\$173,532 66	\$210,384 70
Alpine	134 16	670 80	804 96	146 08	694 32	840 40
Amador	4,756 44	23,782 20	28,538 64	4,744 32	22,549 62	27,704 90
Butte	6,530 16	32,650 80	39,180 96	6,975 32	33,153 78	40,624 10
Calaveras	3,684 72	18,423 60	22,108 32	4,023 84	19,125 36	23,149 20
Colusa	5,084 04	25,420 20	30,504 24	5,464 72	25,973 88	31,672 60
Contra Costa	5,230 68	26,153 40	31,384 08	5,710 40	27,141 60	32,891 00
Del Norte	792 48	3,962 40	4,754 88	803 44	3,818 76	4,622 20
El Dorado	3,547 44	17,737 20	21,284 64	3,700 14	17,586 81	21,286 95
Fresno	9,143 16	45,715 80	54,858 96	10,685 42	50,787 93	61,473 35
Humboldt	8,728 20	43,641 00	52,369 20	9,775 74	46,464 21	56,239 95
Inyo	931 32	4,656 60	5,587 92	1,010 94	4,805 01	5,815 95
Kern	2,538 12	12,690 60	15,228 72	2,959 78	14,067 87	17,027 65
Lake	2,783 04	13,915 20	16,698 24	3,140 72	14,927 88	18,068 60
Lassen	1,550 64	7,753 20	9,303 84	1,679 92	7,854 68	9,664 60
Los Angeles	42,510 00	212,550 00	255,060 00	46,146 34	219,334 11	265,549 45
Marin	3,577 08	17,855 40	21,462 48	4,139 80	19,961 70	24,206 50
Mariposa	1,536 60	7,683 00	9,219 60	1,600 24	7,605 96	9,206 20
Mendocino	6,580 08	32,900 40	39,480 48	7,146 30	33,966 45	41,112 75
Merced	2,450 76	12,253 80	14,704 56	2,684 22	12,758 13	15,442 35
Modoc	2,235 48	11,177 40	13,412 88	2,357 20	11,293 80	13,567 00
Mono	496 08	2,480 40	2,976 48	502 98	2,390 67	2,893 65
Monterey	6,793 80	33,969 00	40,762 80	7,499 88	35,647 02	43,146 90
Napa	5,556 72	27,783 60	33,340 32	6,836 56	27,741 24	33,895 80
Nevada	7,361 64	36,808 20	44,169 84	7,086 54	33,682 41	40,768 95
Orange*						
Placer	4,573 92	22,869 60	27,443 52	4,988 30	23,709 45	28,697 75
Plumas	1,628 64	8,143 20	9,771 84	1,711 46	8,134 59	9,846 05
Sacramento	13,422 24	67,111 20	80,533 44	12,312 22	58,520 13	70,832 35
San Benito	3,040 44	15,202 20	18,242 64	3,315 02	15,756 33	19,071 35
San Bernardino	9,177 48	45,887 40	55,064 88	9,943 40	47,261 10	57,204 50
San Diego	12,593 88	62,969 40	75,563 28	13,809 54	65,636 91	79,461 45
San Francisco	93,152 28	465,761 40	558,913 68	100,665 72	478,465 38	579,131 10

San Joaquin	9,831 12	49,155 60	58,986 72	10,355 08	49,217 82	198 00	59,770 90
San Luis Obispo	6,472 44	32,362 20	38,884 64	7,807 32	34,731 78	387 00	42,426 10
San Mateo	4,018 36	20,092 80	24,111 36	4,135 06	19,653 89	195 00	23,984 05
Santa Barbara	6,477 12	32,385 60	38,862 72	7,436 80	35,347 20	66 00	42,850 00
Santa Clara	17,564 04	87,820 20	105,384 24	19,675 98	93,520 17	123 00	113,319 15
Santa Cruz	6,800 04	34,000 20	40,800 24	7,697 42	36,585 93	1,347 00	45,630 35
Shasta	5,087 16	25,435 80	30,822 96	5,371 76	25,532 04	45 00	30,948 80
Sierra	1,720 68	8,603 40	10,324 08	1,764 58	8,387 07	-----	10,151 65
Siskiyou	3,826 68	19,133 40	22,960 08	4,432 20	21,066 30	-----	25,498 50
Solano	7,062 12	35,310 60	42,372 72	7,430 16	35,315 64	417 00	43,162 80
Sonoma	13,186 68	65,933 40	79,120 08	14,154 82	67,278 03	231 00	81,663 85
Stanislaus	3,744 00	18,720 00	22,464 00	3,944 16	18,746 64	210 00	22,900 80
Sutter	2,063 88	10,319 40	12,383 28	2,172 94	10,328 01	-----	12,500 95
Tehama	4,171 44	20,881 20	25,028 64	4,511 88	21,445 02	558 00	26,514 90
Trinity	1,176 24	5,881 20	7,057 44	1,256 62	5,972 73	-----	7,229 35
Tulare	9,041 76	45,208 80	54,250 56	10,064 58	47,837 07	831 00	58,732 65
Tuolumne	2,471 04	12,355 20	14,826 24	2,649 36	12,592 44	-----	15,241 80
Ventura	3,563 04	17,815 20	21,378 24	4,183 20	19,882 80	-----	24,066 00
Yolo	5,024 76	25,123 80	30,148 56	5,657 28	26,889 12	-----	32,546 40
Yuba	3,427 32	17,136 60	20,563 92	3,663 62	17,413 23	-----	21,076 85
Totals	\$421,980 00	\$2,109,900 00	\$2,531,880 00	\$457,001 32	\$2,172,132 78	\$6,582 00	\$2,635,716 10

*In Los Angeles County census.
† Grammar School Course (annual).

TABLE No. 7.

Statement, by years, showing the amount of Receipts and Expenditures for Public Schools of the State of California, from 1852 to 1890, inclusive.

YEARS.	Total Amount of State School Fund Appropriated.	Total Amount Raised by County and City Taxes.	Total Amount Raised from Miscellaneous Sources.	Total Amount Paid for Teachers' Salaries.	Total Amount Paid for School Houses, Sites, and School Furniture.	Total Amount Expended for School Purposes.
1852			\$2,417 00	\$20,707 00	\$9,775 00	\$33,449 00
1853			10,626 00	47,894 00	6,195 00	65,645 00
1854		\$157,702 00	42,557 00	85,860 00	129,677 00	275,606 00
1855	63,662 00	119,128 00	39,395 00	181,906 00	76,525 00	334,638 00
1856	49,961 00	121,639 00	28,619 00	200,941 00	52,484 00	305,221 00
1857	78,057 00	148,989 00	55,035 00	132,613 00	59,743 00	307,892 00
1858	53,405 00	162,870 00	85,107 00	204,545 00	88,199 00	339,914 00
1859	72,319 00	205,196 00	97,534 00	256,777 00	90,266 00	427,003 00
1860	81,118 00	230,514 00	122,858 00	311,165 00	110,352 00	474,263 00
1861	81,461 00	241,801 00	114,397 00	311,501 00	101,818 00	470,113 00
1862	75,412 00	294,828 00	141,806 00	350,249 00	249,274 00	441,258 00
1863	145,637 00	328,554 00	68,269 00	328,338 00	93,931 00	483,407 00
1864	132,217 00	260,842 00	84,084 00	411,101 00	167,393 00	656,198 00
1865	168,828 00	390,306 00	91,181 00	521,585 00	257,804 00	883,116 00
1866	132,410 00	470,668 00	79,600 00	551,462 00	185,056 00	859,259 00
1867	268,910 00	595,718 00	81,066 00	693,110 00	238,010 00	1,163,348 00
1868	252,603 00	654,738 00	75,985 00	703,639 00	221,118 00	1,151,407 00
1869	290,796 00	847,249 00	66,551 00	873,814 00	205,706 00	1,290,685 00
1870	360,447 00	839,756 00	63,441 00	976,938 00	339,362 00	1,529,047 00
1871	423,853 00	923,809 00	46,690 00	1,033,125 00	390,158 00	1,713,491 00
1872	424,022 00	1,249,943 00	232,075 00	1,282,739 00	290,119 00	1,861,353 00
1873	430,230 00	1,641,597 00	310,502 00	1,434,367 00	374,069 00	2,113,356 00
1874	428,414 12	1,332,208 82	345,316 95	1,640,830 00	192,467 00	2,111,155 00
1875	1,212,252 03	1,115,530 06	676,259 64	1,810,480 00	421,279 00	2,658,241 00
1876	1,317,603 84	1,240,637 31	158,206 40	1,958,389 96	440,706 37	2,858,600 98
1877	1,474,600 26	1,486,233 73	137,100 31	2,149,435 70	147,426 43	2,749,729 46
1878	1,579,195 52	1,393,014 96	106,396 84	2,272,551 19	300,094 92	3,155,815 27
1879	1,423,941 75	1,446,862 04	92,852 41	2,285,732 39	293,126 38	3,010,907 13
1880	1,506,171 84	1,393,572 44	104,824 80	2,207,043 85	190,270 94	2,864,571 42
1881	1,790,457 62	1,343,306 02	32,048 79	2,346,036 58	204,849 66	3,047,605 03
1882	1,882,121 67	1,240,843 64	23,046 88	2,406,780 68	221,089 05	3,122,666 20
1883	1,890,724 20	1,315,818 96	32,462 71	2,511,078 40	293,839 63	3,312,215 23
1884	1,894,191 00	1,411,543 56	27,715 40	2,573,623 54	292,165 85	3,364,223 55

1885	1,831,171 44	1,694,959 45	53,140 83	2,588,403 46	406,811 74	3,595,030 87
1886	1,890,733 32	1,690,704 86	138,596 48	2,710,621 82	283,006 18	3,505,431 63
1887	2,027,789 40	1,793,809 95	51,250 25	2,912,859 30	408,704 96	3,889,888 17
1888	2,168,686 08	2,170,058 19	251,554 55	3,083,027 24	421,554 82	4,321,381 50
1889	2,531,880 00	2,412,254 64	337,006 91	3,343,191 80	435,548 42	4,396,805 71
1890	2,635,716 10	2,293,335 75	98,092 22	3,594,588 98	703,947 79	5,119,036 68

TABLE No. 8.
Statistical Summary, by years, of the Public Schools of California, from 1851 to 1890, inclusive.

YEARS.	Number of Children Listed by Census Marshals.	Number of Children Enrolled on School Register.	Average Daily Attendance.	Number of Schools.	Number of Teachers.	Number of Children under five years of age.	Number of Census Children in Private Schools.
1851	5,906	1,846	-----	49	-----	-----	-----
1852	17,821	3,314	-----	20	-----	-----	-----
1853	19,442	4,193	2,020	111	-----	-----	-----
1854	20,075	9,746	4,635	168	214	-----	-----
1855	26,077	-----	6,442	227	301	-----	-----
1856	30,039	-----	8,495	321	392	-----	-----
1857	35,722	17,232	9,717	368	486	-----	-----
1858	40,530	19,822	11,183	432	517	23,558	-----
1859	48,676	23,519	13,364	423	744	28,300	-----
1860	57,917	26,993	14,750	593	831	30,932	5,438
1861	68,395	31,786	17,804	684	932	35,334	6,306
1862	71,821	36,566	19,262	715	962	38,127	6,886
1863	78,055	36,540	19,942	754	919	39,081	9,158
1864	86,031	47,588	24,794	832	1,079	41,323	11,359
1865	95,067	50,089	29,592	947	1,155	42,733	12,478
1866	84,179	50,273	-----	913	1,268	52,037	15,671
1867	94,213	62,227	-----	1,083	1,389	52,975	14,025
1868	104,118	65,828	43,681	1,228	1,590	58,119	14,820
1869	112,743	73,754	49,802	1,354	1,687	57,983	16,273
1870	121,751	85,808	54,271	1,492	1,869	62,940	16,198
1871	130,116	91,332	64,286	1,550	2,032	66,292	15,524
1872	137,351	94,720	69,700	1,654	2,301	69,723	13,787
1873	141,610	107,593	69,461	1,868	2,336	70,086	12,507
1874	159,717	120,240	72,283	2,005	2,452	73,876	14,149
1875	171,563	130,930	78,027	2,190	2,693	78,650	15,021
1876	184,787	140,468	83,391	2,336	2,894	83,595	14,025
1877	200,067	147,863	89,539	2,485	3,077	88,951	15,344
1878	205,475	154,064	94,696	2,578	3,393	85,061	15,310
1879	216,404	156,769	98,468	2,743	3,453	86,633	15,432
1880	215,878	158,765	100,966	2,805	3,595	87,635	14,958
1881	211,237	163,855	105,541	2,952	3,737	88,068	13,898
1882	216,330	168,024	107,177	3,036	3,777	86,490	14,572
1883	222,846	174,611	112,594	3,232	3,930	86,769	15,957
1884	235,672	179,801	124,814	3,262	4,083	87,643	17,953
1885	250,097	184,001	116,025	3,374	4,242	89,758	19,519

1886.....	259,973	189,230	125,718	3,505	4,444	92,507	18,919
1887.....	272,448	196,907	129,297	3,755	4,888	89,940	22,661
1888.....	270,500	207,080	132,277	4,002	4,898	98,203	20,768
1889.....	275,302	215,905	143,733	4,324	5,256	104,174	21,044
1890.....	280,882	221,756	146,689	4,607	5,434	106,302	21,460

EXHIBITS.

A.—ARBOR DAY CIRCULARS.

B.—COUNTY HIGH SCHOOL BILL.

C.—FREE TEXT-BOOK BILL.

D.—STATE TEACHERS' ASSOCIATION.

EXHIBIT A.

ARBOR DAY CIRCULARS.

In the latter part of January, 1890, the following Arbor Day circular was sent to all Superintendents, teachers, and clerks throughout the State. The response it met with was more encouraging than was to be expected from a *voluntary* first effort.

To enlist more thoroughly the interest of the general public, the attention of the press throughout the State was called to the matter by means of a circular letter, and in herein acknowledging my own appreciation of the very general coöperation given to the subject, I also include that of the County Superintendents and teachers:

To the School Superintendents, teachers, Trustees, and parents of the public school children of California:

In my last biennial report I suggested a legally appointed "Arbor Day." Nothing, however, was done by the last Legislature in the matter, and as the season for tree planting is again upon us, I am constrained to make a direct appeal to you for an effort on your part to accomplish something *this* year in the way of beautifying your school grounds by the planting of trees, vines, and shrubs, and teaching the children to love and care for such things.

All will agree that there is no spot on earth that may not be made more beautiful by the help of trees and flowers. Much has been written and said about the wanton destruction of our forests, and while our schools cannot protect the forests, they may and can train up a generation which will frown upon and rebuke their wanton destruction—a generation which will not leave our mountains, hillsides, and home surroundings treeless. Trees everywhere exert a controlling moral influence. This fact we know and feel in our every day's existence, and every sapling which we plant in our door yard, or upon the naked sidewalk in front of our dwellings, makes, with every spreading branch, expanding leaf, and opening blossom, home pleasanter, our recollections of it sweeter, and our love for it stronger. Our schools bear a close relation to the family, and we should not be satisfied till our school grounds, as well as our homes, are such, in themselves and their surroundings, as shall be attractive, and surely tend to strengthen, ennoble, and elevate human character. I therefore earnestly urge the Superintendents in each county, and the Trustees in each district, to agree in setting apart one day to be known as "Arbor Day," and unite with the teachers and friends in taking the children out of their school-rooms, and teaching them how to plant trees, vines, and shrubs, and how to care for them when planted. Let us teach the children to become familiar with trees, to think of their value, and to love them. Thus may they be led by Nature's hand to noble thoughts and worthy deeds. Superintendent Brooke, of San Bernardino County, is doing much in this direction in the schools of his county. I notice also that George C. Roeding, a nurseryman in Fresno County, has offered to furnish the following trees and shrubs free to every school district in his county that will apply for them: Two maples, one Texas umbrella, two fig, one pear, one locust, two olive trees, one fan palm, and two rose bushes. He notifies Trustees to make application at once, and he will have the trees and plants packed and ready for delivery by February fifteenth. Is there not some one in your county or neighborhood who can and who will, if it is suggested to him, make a like offer to your districts? Where there is a will, there is generally found a way. In some districts the school grounds are already well ornamented with trees. In such cases let the occasion be observed by planting trailing vines, shrubs, and flowers, thus increasing the beauty of the grounds, and creating in the children a love for the beautiful and a pride in the appearance of the school building.

I sincerely hope that you will unite in an effort to accomplish the object herein suggested. Let Arbor Day once be inaugurated, and we may succeed in arousing a sentiment among the people which will make possible and effective remedial legislation in the line of forest laws, such as may be demanded.

Very sincerely yours,

IRA G. HOITT,
Superintendent Public Instruction.

I would suggest that a short program of suitable exercises be prepared for the occasion, which may be varied as tastes, circumstances, or opportunities may permit.

Older pupils may present essays on trees, in their manifold relations to human life; on the different varieties, habits, sizes, enemies, and the care needed to preserve them; on the famous trees of history, and the forms of worship that have been connected with trees.

Younger children may give a greater variety of entertainment, with appropriate musical selections and recitations of verses and poems.

A pretty exercise given in some of the New York schools, where Arbor Day is legally established, is called "Voices of the Trees," in which many children may take part, each child speaking as a tree.

Illustration: "They call me sugar maple, and I am a favorite ornamental tree. People love me because I am possessed of sweetness. I claim to have made more boys and girls happy than any other tree. I have many changes of dress, wearing in spring the softest shade of every color: in the summer the purest emerald; in the autumn, the most brilliant yellow. My wood is used for furniture, floors, and for furnishing the interior of houses, and after the houses are finished few can warm them better than I."

REFERENCE LIST FOR RECITATIONS.

Autumn Woods: *Bryant*.
Among the Trees: *Bryant*.
Forest Hymn: *Bryant*.
Planting of the Apple Tree: *Bryant*.
The Spirit of Poetry: *Longfellow*.
Sunrise on the Hill: *Longfellow*.
Eliot's Oak: *Longfellow*.
Under the Willows: *Lowell*.
On Planting a Tree: *Lowell*.
The Planting: *Dinah Mulock Craik*.
Wood Giant: *Whittier*.

All Things Beautiful: *John Keble*.
Hymn to the Flowers: *Horace Smith*.
The Birthday of Spring: *Horace Smith*.
The Use of Flowers: *Mary Howitt*.
Breathings of Spring: *Mrs. Hemans*.
The Ivy Green: *Dickens*.
The Last Leaf: *Holmes*.
Talking Oak: *Tennyson*.
A Story of an Apple Tree: *Anna Wells*.
The Voice of the Grass: *Sarah Roberts*.
Woodman Spare that Tree: *Morris*.

FOR SINGING.

"Little White Lily," "Spring's Delights," "To the Woodland, Away," "Swinging Neath the Old Apple Tree," "Come to the Greenwood," "Come Where the Lilies Grow," "Up the Hills on a Sunny Morn," "There's a Wedding in the Orchard, Dear," "Buttercups and Daisies."

THE CLASS TREE.

[Air, *America*.]

We, children of the free,
Come here to plant this tree,
With prayer and song;
A living sign to stand
Of love to Fatherland
While years prolong.

In every flower and tree
God's forming hand we see,
And His great love.
And every bud and leaf
Increases our belief
In Heaven above.

Dear God of Nature, grant
This tree which now we plant
May live and grow
To bless with grace and shade
This loved and cherished glade,
Our love to show.

—P. Harlow.

Children, thank God for these great trees,
That fan the land with every breeze,
Whose drooping branches form cool bowers,
Where you can spend the summer hours,—
For these thank God.

For fragrant sweets of blossoms bright,
Whose beauty gives you such delight;
For the soft grass beneath your feet,
For new mown hay and clover sweet,—
For all thank God.

—Anon.

You will find something far greater in the woods than you will find in books. Stones and trees will teach you that which you will never learn from masters.—*St. Bernard.*

There is something unspeakably cheerful in a spot of ground which is covered with trees, that smiles amidst the rigors of winter, and gives us a view of the most gay season in the midst of that which is the most dead and melancholy.—*Addison.*

As the leaves of trees are said to absorb all noxious qualities of the air, and to breathe forth a purer atmosphere, so it seems to me as if they drew from us all sordid and angry passions, and breathed forth peace and kindness.—*Irving.*

Give fools their gold and knaves their power;
Let fortune's bubbles rise and fall;
Who sows a field, or trains a flower,
Or plants a tree, is more than all.

For he who blesses most is blest;
And God and man shall own his worth,
Who toils to leave as his bequest
An added beauty to the earth.

—*Whittier.*

PLANT A TREE.

He who plants a tree
Plants a hope:
Rootlets up through fibers blindly grope;
Leaves unfold into horizons free.
So man's life must climb
From the clods of time
Unto heavens sublime.

Canst thou prophesy, thou little tree,
What the glory of thy boughs shall be?

He who plants a tree,
He plants love:
Tents of coolness spreading out above
Wayfarers he may not hope to see.
Gifts that grow are best;
Hands that bless are blest;
Plant! Life does the rest.
Heaven and earth help him who plants a tree,
And his work its own reward shall be.

—*Lucy Larcom.*

THE TREE.

The Tree's early leafbuds were bursting their brown;
"Shall I take them away?" said the Frost, sweeping down.

"No, leave them alone
Till the blossoms have grown,"
Prayed the Tree, while he trembled from rootlet to crown.

The Tree bore his blossoms, and all the birds sung;
"Shall I take them away?" said the Wind, as he swung.

"No, leave them alone
Till the berries have grown,"
Said the Tree, while his leaflets quivering hung.

The Tree bore his fruit in the mid-summer glow;
Said the girl, "May I gather thy berries now?"

"Yes, all thou canst see;
Take them; all are for thee,"
Said the Tree, while he bent down his laden boughs low.

—*Björnstjerne Björnson.*

FLOWERS.

With what a lavish hand
God beautifies the earth,
When everywhere, all o'er the land,
Sweet flowers are peeping forth.

Down by the babbling brook,
Up in the silent hills,
The glen, the bower, the shady nook,
Their breath with fragrance fills.

They creep along the hedge,
They climb the rugged height,
And, leaning o'er the water's edge,
Blush in their own sweet light.

They seem to breathe and talk,
They pour into my ear,
Where'er I look, where'er I walk,
A music soft and clear.

They have no pride of birth,
No choice of regal bower;
The humblest, lowliest spot on earth
May claim the fairest flower.

I have written many verses, but the best verses I have produced are the trees I have planted.—*Holmes.*

What conqueror in any part of "life's broad field of battle" could desire a more beautiful, a more noble, or a more patriotic monument than a tree planted by the hands of pure and joyous children, as a memorial of his achievements?

What earnest, honest worker with hand and brain, for the benefit of his fellowmen, could desire a more pleasing recognition of his usefulness than such a monument, a symbol of his or her productions, ever growing, ever blooming, and ever bearing wholesome fruit?—*Lossing.*

I recommend that the teachers in all the schools of the State so order their instructions and exercises upon Arbor Day, that every child may learn something of the value, or at least of the beauty of tree culture, and may take a personal interest in the planting of some tree or shrub in the school grounds, or in the adjacent commons.—*Gov. Lounsbury, of Connecticut.*

Let the children in our schools, the young men and women in our colleges, seminaries, and universities, coöperate in the proper observance of the day by planting shrubs, vines, and trees that will beautify the home, adorn the public grounds, add wealth to the State, and thereby increase the comfort and happiness of our people.—*Proclamation of Gov. Fifer, of Illinois.*

THE BRAVE OLD OAK.

A song for the oak, the brave old oak,
Who hath ruled in the greenwood long!
Here's health and renown to his broad green crown,
And his fifty arms so strong.

There is fear in his frown when the sun goes down,
And the fire in the west fades out,
And he showeth his might on a wild midnight
When the storms through his branches shout.

Then sing to the oak, the brave old oak,
Who stands in his pride alone;
And still flourish he, a hale green tree,
When a hundred years are gone!

—*Henry Fothergill Chorley.*

The following suggestions have been prepared and distributed by the Forestry Division of the United States Department of Agriculture, with a view of giving, in the briefest manner, such general advice in regard to the selection of trees for the occasion, and to the manipulation of planting, as may aid teachers, pupils, and others to perform the practical work of Arbor Day with reasonable hope of success:

CHOICE OF TREES.

1. *General Considerations.*—Trees for school grounds and yards, along roadsides and streets, must be such as are least liable to suffer from injuries. They should be compact and symmetrical in shape, free from objectionable habits, such as bad odors, root sprouting, frequent dropping of parts, etc., and from insect pests, and if planted for shade, should have a broad crown and a dense foliage, budding early in spring and retaining leaves long into the fall. Absence of skillful hands at tree planting on Arbor Days would also limit the selection to those which are transplanted easily, and require the least care.

Trees native to the region in which the planting is done usually have more promise of success, and are generally less costly than exotics. *Trees from well managed nurseries* are preferable to those grown in the forest, because their root system is better prepared for transplanting. Rapidly growing trees, although giving shade soonest, are mostly short lived, and become soonest unsightly.

2. *Size*.—Although as a rule small plants have a better promise of success, other considerations recommend the choice of larger sizes for roadside and ornamental planting. Trees of any size can be successfully transplanted, but in proportion to the size grows the difficulty, the amount of work, and the care necessary. As a rule the *largest size should not exceed two to three inches* in diameter at the base, and ten to fifteen feet in height. Those one half that size will probably make better growth, because less of their root system will be curtailed in taking them up for transplanting.

3. *Diagnosis of a tree suitable for transplanting*.—(a) An abundance of fibrous roots; not the turnip-like main or tap-root, but the little fibers sustain the life of a tree. See that there are plenty of them, compactly grown within a small compass, and that they are not stripped of their bark, or torn at their ends, or dried up.

(b) A normal form and well proportioned development of shaft and crown. The shaft should be clean and straight, neither thick set and short, nor thread-like and over elongated, but gradually tapering, and strong enough to hold up its head without support. The normal crown is characterized by vigorous, full sized leaves, or else by a large number of thick and full buds. It covers the main stem one third to one half its length, with a symmetric spread evenly branched, and has only one leader of moderate length.

The length and vigor of the last year's shoots, number and thickness of buds, and appearance of the bark, afford means of judging the healthy constitution of the tree.

(c) The position from which the tree came has some influence on its further development. Trees from the forest have generally a wide-spreading root system, which is difficult to take up and transplant. Those which have grown in the shade of the forest, as a rule, do not start easily in the open sunlight; those from cool north sides are apt to sicken when placed on hot exposures, and vice versa. A healthy tree from poor soil transferred into better conditions will show itself grateful by vigorous development.

TREATMENT BEFORE TRANSPLANTING.

Transplanting is at best a forcible operation, and injury to the roots, although it may be small, is almost unavoidable. The roots are the life of the tree, and need, therefore, the most attention. In taking up a tree for transplanting the greatest care must be exercised to secure as much of the root system intact as possible, especially of the small fibrous roots.

1. *Never allow roots to become dry, from the time of taking up the tree until it is transplanted*.—A healthy looking tree may have the certainty of death in it if the root fibrils are dried out. To prevent drying during transportation, cover the roots with moist straw, or moss, or bags, or leave on them as much soil of the original bed as possible. At the place where the tree is to be planted, if the planting cannot be done at once, "heel in" the roots, *i. e.*, cover them and part of the lower stem with fresh earth, or place the tree in the plant hole, throwing several spadefuls of earth on the roots.

2. *Pruning roots and branches* is almost always necessary, but must be done with great care, especially as to root pruning. *The cutting at the roots should be as little as possible*, only removing, with a clean, sharp cut, the bruised and broken parts. Extra long tap-roots may be cut away, but all the small fibers should be preserved. The cutting at the top is done to bring crown and root into proportion; the more loss at the root system has been experienced the more need of reducing the crown system. Larger trees, therefore, require mostly severer pruning, especially on poor soils; yet, if there be fibrous roots enough to sustain great evaporation from the crown, the less cut the better. With large trees severe pruning is less dangerous than too little. A clean cut as close as possible to the stem or remaining branch will facilitate the healing of the wound. No stumps should be left (except with conifers, which suffer but little pruning). Shortening of the end shoots to one half or two thirds of their length may be done a little above a bud which is to take the lead. As a rule, the pruning for symmetry should have been done a year or so before transplanting, but may be done a year after.

METHOD IN PLANTING A TREE.

1. Holes are best made before the trees are brought to the ground. They should be a little deeper than the depth of the root system, but twice as large around as seems necessary, to facilitate penetration of rains and development of rootlets through the loosened soil. Place the top soil, which is better (being richer in easily assimilated plant food) to one side, the raw soil from the bottom to the other side; in filling back bring the richer soil to the bottom. If it be practicable, improve a heavy loamy soil by adding to and mixing with it looser sandy soil, or a loose poor soil by enriching it with loam or compost. Keep all stones out of the bottom; they may be used above the roots, or better, on the surface. Providing proper drainage is the best means of improving ground for tree planting. Use no manure except as a top dressing.

2. Planting is best done by two or three persons. A, who manipulates the tree is the planter, and responsible for the result; B and C do the spading under his direction. A places the tree in the hole, to ascertain whether this is of proper size; a board or stick laid across the hole aids in judging the depth. Trees should not be set deeper than they stood before, except in loose, poor soil. *More trees are killed by too deep planting than the*

reverse. If the root system is developed sideways but not centrally, as is often the case, a hill is raised in the hole to fill out the hollow space in the root system, and the earth of the hill is patted down with the spade. When the hole is in proper order, A holds the tree perpendicularly in the middle of the hole, with the side bearing the fullest branches toward the south or southwest, for better protection of the shaft against the sun. B and C spread the roots into a natural position, then fill in the soil, using the good soil first—small spadefuls deliberately thrown over the roots in all directions—while A, by a slight shaking and pumping up and down of the stem, aids the earth in settling around the rootlets. *A close contact of the soil with the rootlets is the secret of success in planting.* Only fine mellow soil, not too moist, and free from stones, will permit such close adjustment to the rootlets, which should also be aided by hand and fingers filling in every crevice. A, while setting the tree, must exercise care to keep it in proper position and perpendicular, until the soil is packed so as to keep the tree in place; then B and C rapidly fill the holes. A treading down the soil firmly after a sufficient quantity is filled in, finishing off a little above the general level to allow for settling, and finally placing the stones or any mulching around the stem.

WATERING.

The practice of using water while planting can hardly be said to be a good one, unless the water is very carefully applied with a "rose," after the soil is well filled in and packed around the fibrous roots. Especially with a soil which has a tendency to clog, there is great danger of an uneven distribution and settling, with consequent empty spaces between the roots. *More trees are probably killed by too much water in transplanting than by too little.* Water after the transplanting (and perhaps before the last shovels of earth are filled in) especially if the soil was dry, is useful and should be applied during the hot season, choosing the late afternoon or evening for applying it.

AFTER CARE.

Any mulch of waste material, hay, straw, or better, wood shavings or chips, sawdust, or even stones simply placed around the foot of the tree, is of excellent service in checking evaporation.

Keeping the ground free from weeds and grass, and preventing it from baking, by occasional hoeing and raking, is advisable. To prevent the trees from being swayed by the wind, if of larger size, they should be staked firmly; a loose post is worse than none. The tying should be so done as not to cut or injure the tree; a tree box insures more safety against accidents. With the development of the crown, it becomes necessary to trim it, so as to carry the top above reach. Trees are not benefited by being used as hitching posts, or climbing poles, or other frolic.

SUMMARY.

Summarizing the elements of success in tree planting, they are:

1. Trees suitable to soil and surrounding conditions;
2. A well developed root system, kept in living condition;
3. Wide holes and mellow soil;
4. Firm packing of soil around the roots.

CHOICE OF KINDS.

Leaving out conifers, which require more careful handling and better situations than are, as a rule, to be had on occasions like that in view, there are over a hundred indigenous species to choose from for planting on the Atlantic side; of these, thirty to forty might deserve attention for Arbor Day tree planting, according to climate, soil, and situation, or object. It is best to limit the choice for this occasion to trees of recognized merit, native to your locality; opportunities will vary the choice. It is only possible here to name the following selections, which admit of a wide application in the Atlantic States:

Three trees to be planted where nothing else will grow—easily transplanted, growing rapidly, but short lived, liable to injuries, root sprouting, soon scraggy looking, unless specially attended: Silver maple, Carolina poplar, and box elder.

Four trees among the best for street and lawn: Sugar maple, red maple, linden, and elm. *Five trees desirable for lawn and yard*: Tulip tree, red oak, willow oak, black cherry, and sweet gum.

Six trees suitable for special positions: Sycamore, black birch, ash, black walnut, chestnut, and beech.

Two foreigners of note: Horse chestnut and paulownia.

The California black walnut has been recommended by Nurseryman J. T. Bogue, of Marysville, as being one of the best trees for this purpose in our State, and being greatly interested in the matter of school ground decoration, he will donate this tree, in numbers to suit, to all County Superintendents applying for same.

EXHIBIT B.

COUNTY HIGH SCHOOL BILL.

AN ACT TO AUTHORIZE THE ESTABLISHMENT OF COUNTY HIGH SCHOOLS,
AND PROVIDE FOR THEIR SUPPORT.

*The People of the State of California, represented in Senate and Assembly,
do enact as follows:*

SECTION 1. There may be established in any county in this State one or more County High Schools; *provided*, that at any general election held in such county after the passage of this Act, the majority of all the votes cast at such election shall be in favor of establishing and maintaining such County High School or Schools at the expense of the county.

SEC. 2. The Board of Supervisors may, at any general election to be held in any county after the passage of this Act, submit the question to the qualified electors of establishing a County High School. Said election shall be conducted in the manner prescribed by law for conducting elections. The ballots at such election shall contain the words "For County High School," and "Against County High School." It shall be the duty of the officers of said election to certify the result to the County Clerk, and if the majority of all the votes cast are in the affirmative, the County Clerk shall record the result.

SEC. 3. It shall be the duty of the Board of Supervisors, within twenty days after the meeting, to locate the school in some suitable and convenient place in said county. The Board of Supervisors shall also estimate the cost of purchasing a suitable lot, erecting a building, or the purchase of building and lot, and furnishing the same, for the accommodation of such school.

SEC. 4. When such estimate has been made it shall be the duty of the County Board of Education to procure and adopt plans for the building, or the purchase of building and lot, with specifications which shall come within the estimated cost, and report the same to the Board of Supervisors within sixty days. Upon the approval by the Board of Supervisors of said plans with specifications, the Board of Supervisors shall thereupon proceed to levy a special tax upon all the assessable property in the county, sufficient to raise the amount estimated as necessary for purchasing a lot, procuring plans and specifications, erecting a building, furnishing the same, and fencing and ornamenting the grounds. Said tax shall be computed, entered on the assessment roll, and collected in the same manner as other taxes are computed, entered, and collected, and the amounts when collected shall be deposited in the County Treasury, and be known and designated as the County High School Building Fund, and shall be drawn from the treasury in the manner provided by law for drawing money from the treasury appropriated for special purposes.

SEC. 5. The Board of Supervisors shall secure, in the name of the county, the title to any lot or lots, let the contract for building, see that the work of construction is properly done, that the building is properly furnished, and the grounds properly fenced and ornamented; *provided*, that they may purchase, enlarge, or repair any building already constructed in the county, which may be suitable for the purposes, and in their discretion they may rent a building temporarily.

SEC. 6. It shall be the duty of the County Board of Education to furnish to the Board of Supervisors, annually, an estimate of the amount of money needed to pay all of the necessary expenses of running said school; to adopt the necessary text-books (the State series shall be used in grades and classes for which they are adapted); to adopt and enforce a course of study for said school; to employ suitable teachers, janitors, and other employes, and discharge such employes when deemed advisable by them, and to do any and all other things necessary to the proper conduct of the school. The course of study shall be such as will, when it is completed by the student, fit him for admission to the University of California.

SEC. 7. It shall be the duty of the Board of Supervisors to include in their annual tax levy the amount estimated by the County Board of Education as needed to pay the expenses of conducting the County High School, and such amount, when collected and paid into the County Treasury, shall be known as the "County High School Fund," and may be drawn therefrom in the following manner, for the purpose of defraying the expenses of conducting said County High School: The County Board of Education shall draw their order on the County Superintendent of Schools, in the manner and form provided by law for School District Trustees drawing orders on their District School Funds, and the County Superintendent shall draw his requisition on the Auditor, who shall draw his warrant on the County Treasurer in favor of the person or persons to whom the amount called for in such requisition is due. All orders, requisitions, and warrants drawn on the "County High School Fund," in all other respects except as specified in this Act shall be subject to the law governing school districts.

SEC. 8. In case the qualified electors of any county deem it expedient to establish and maintain more than one County High School, then such additional school or schools may be established and maintained in the manner prescribed in this Act for establishing and maintaining a County High School.

SEC. 9. All County High Schools shall be open for the admission of graduates holding diplomas from the County Grammar Schools of the county, and to all pupils of the county who can pass the examination for admission. The examination for admission shall be conducted by the County Board of Education and the Principal of the County High School.

SEC. 10. This Act shall take effect from and after its passage.

EXHIBIT C.

FREE TEXT-BOOK BILL.

AN ACT AUTHORIZING SCHOOL DISTRICTS, CITIES, CITIES AND COUNTIES, OR INCORPORATED TOWNS, IN THE STATE OF CALIFORNIA, TO FURNISH THE CHILDREN OF THEIR RESPECTIVE PUBLIC SCHOOLS WITH THE FREE USE OF SCHOOL TEXT-BOOKS.

The People of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. At the next annual election, after the passage of this Act, for School Trustees in districts operating under the general school law of the State, or for members of Boards of Education or School Trustees in any city, city and county, or incorporated town, the authorities thereof whose duty it is to call such election shall, in the method now described by law for the submission of the question of raising a special tax, and in conformity with its provisions, submit to the qualified electors of such district, or city, or city and county, or incorporated town, the question: "Shall an annual tax be levied for the purchase of text-books for free use in the public schools?"

SEC. 2. The election so called shall be conducted in conformity with the law now made and provided for the holding of elections for special tax for school purposes.

SEC. 3. At such election the ballots shall contain the words, "Annual Tax for Free Text-Books," and the voter shall print or write thereafter the word "Yes" or the word "No."

SEC. 4. If the majority of the votes cast are found to be in the affirmative, then the Trustees of the district, or the Board of Education, or Trustees of Schools, in any city, city and county, or incorporated town, as the case may be, shall, upon ascertaining said vote in the manner prescribed by law, estimate the cost of text-books needed for the next succeeding year, and annually thereafter, and report the amount of money necessary to procure the same for the next succeeding year and annually thereafter, to the Board of Supervisors in the case of all districts operating under the general school law of the State, or under the law for the government of any city and county thereof, and to the Board of Aldermen, City Council, Town Trustees, or other officers whose duty it now is by law to levy taxes for the use of said district, in the case of cities and incorporated towns, who shall proceed to levy the tax in the form and manner now prescribed by law, and the taxes so levied shall be computed and entered on the assessment roll and collected in the manner now prescribed for the computation, entry, and collection of other special taxes for school purposes, and when so collected shall be kept separate and apart from all other moneys belonging to said district, or city, or city and county, or incorporated town, and shall be known as the "Free Text-Book Fund."

SEC. 5. If a majority of the votes cast are found to be in the negative, the question may be again submitted at any subsequent annual or special election, in the discretion of the officers whose duty it is made by section one of this Act to submit such question; and whenever a majority of votes cast at such election shall be found to be in the affirmative, the estimate, levy, and collection of money required, shall take the course prescribed in section four of this Act.

SEC. 6. Whenever books published by the State are needed in any city, city and county, or incorporated town in which the use of text-books shall have been declared free, as described in the foregoing sections of this Act, the Board of Education or Trustees of Schools in such city, city and county, or incorporated town, shall cause, in the manner prescribed by law for the drawing of warrants, a warrant to be drawn upon the proper Treasurer, whether of county, city, city and county, or incorporated town, against the "Free Text-Book Fund," belonging to said city, city and county, or incorporated town, for said amount, in favor of the Clerk or Secretary of said Board of Education or Trustees of Schools, and it shall be the duty of said Clerk or Secretary to send immediately the amount so drawn to the Superintendent of Public Instruction with his order for books needed. Whenever any books published by the State are needed in any district of any county operating under the general school law of the State in which the use of text-books shall have been declared free, as prescribed in the foregoing sections of this Act, the Trustees of said district shall transmit a list of the books required to the County Superintendent, together with an order for a requisition upon the County Auditor for the amount of money needed to pay for the same. Said order shall direct the requisition to be drawn in favor of the County Superintendent upon the "Free Text-Book Fund" of said district, and upon receipt of such requisition, it shall be the duty of the Auditor to draw his warrant for said amount against said fund in favor of said County Superintendent, who shall immediately transmit such amount, with his order for books needed, to the Superintendent of Public Instruction.

SEC. 7. Whenever books, adopted by the proper authorities and not published by the State, are needed for use in the public schools, they shall be purchased and paid for in the manner now prescribed by law for the purchase and payment of school supplies; *provided*, that payment shall be made in all such cases from the "Free Text-Book Fund."

SEC. 8. The books, after being put into use, shall, in all cases, be considered as the property of the ——— district, city, city and county, or incorporated town where used, and shall be kept in the school library to be loaned to the pupils under such rules as may be prescribed by the School Trustees or the Board of Education; *provided*, that each book shall be stamped on the fly-leaf and title page, and on every hundredth page of the book with the following words: "Department of Public Instruction, State of California, ——— County, ——— District;" and the County Superintendent is hereby authorized and instructed to procure such stamp for each district in his county, and to pay for the same out of the Library Fund of such district. Any pupil who shall lose or destroy a book, shall be obliged to replace it by a new one. Failing to do this within a reasonable time, such pupil shall be refused a seat in school until such restitution is made.

SEC. 9. In all districts, cities, cities and counties, or incorporated towns

in which the use of text-books shall have been declared free, in the manner described in the preceding sections of this Act, it shall be the duty of all Principals of schools where more than one teacher is employed, and of all teachers in other schools, to take an account of the books loaned to each pupil at the beginning of each term, and during the term, and to see that such books are returned when a pupil finally leaves the school, or at the end of each term; and to make a report to the Secretary of the Board of Education, or Clerk of the Board of Trustees, stating the number of books of each kind on hand, and their condition, and giving the names of any pupils who have neglected or refused to return the books loaned to them. During vacation the books shall be in the custody of the authorities having charge of the other property of the district.

SEC. 10. Any teacher, school officer, or other person who shall procure or cause to be procured, under this Act, any school book or books from the State Printing Office for any other purpose than that described in this Act, or shall use or give away books so obtained for any other use than for the pupils and teachers in the public schools of this State, shall be guilty of a misdemeanor.

SEC. 11. This Act shall take effect from and after its passage.

EXHIBIT D.

STATE TEACHERS' ASSOCIATION.

STATE TEACHERS' ASSOCIATION FOR 1888.

The California State Teachers' Association for 1888 convened in the Assembly Chamber of the State Capitol, Sacramento, Wednesday afternoon, December twenty-sixth.

Prof. Albert Cook, President of the Association, called to order, and Miss Mary E. Morrison, of San Francisco, took her place at the Secretary's desk.

The following committees were appointed:

On Nominations.—J. B. McChesney, of Oakland; E. T. Pierce, of Pasadena; A. J. Tiffany, Nevada; D. C. Clark, Santa Cruz; Charles H. Murphy, Tulare; Dr. W. B. Howard, Stanislaus; Miss Harriet McCormack, Sacramento; Miss Myra Parks, Lassen; T. E. Kennedy, San Francisco.

On Place of Meeting.—Ira G. Hoitt, State Superintendent; A. L. Mann, San Francisco; Job Wood, Jr., Monterey; W. W. Seaman, Los Angeles; P. M. Fisher, Oakland.

On Resolutions.—Madison Babcock, San Francisco; E. C. Atkinson, Sacramento; G. C. Edwards, Berkeley; Jos. O'Connor, San Francisco; Mrs. A. L. Mann, San Francisco.

The Convention then adjourned to 8 P. M.

The Association reassembled at 8 P. M., with J. H. Pond, Principal of the Sacramento High School, in the chair. The exercises of the evening were in the nature of a reception, tendered to the Association by the Governor of the State and the Mayor of Sacramento. After appropriate opening exercises, the Governor delivered an address of welcome. Among other things he said:

As Governor of the State I am proud of our teachers, and I know I voice the sentiments of the whole people. I am proud that you have adopted the idea of a reformatory or reform school. I would have you talk to the boys. Have them stop their cigarette smoking. Impress them with the fact that they are to be our future citizens and statesmen.

Ira More, Principal of the Los Angeles Normal School, responded in an appropriate and eloquent address.

Eugene Gregory, Mayor of Sacramento, then delivered an address of welcome on behalf of the citizens of Sacramento.

State Superintendent Hoitt responded. He said:

It was not many years ago when the public school teacher was looked upon with little consideration, but to-day the great cities of the nation vie with each other to receive the national gatherings of these character builders. To-day is the second time the Governor has extended the right hand of fellowship and words of welcome to an assemblage like this, of intelligent, earnest, thoughtful men and women. They meet to do battle against ignorance, to make the world of the future better than the world of to-day. On behalf of the teachers I return thanks to the Governor and Mayor for their words of welcome.

Brief remarks were also made by Horace Davis, President of the State University, and others.

SECOND DAY.

The exercises of the day were introduced by the reading of the following appropriate poem, written for the occasion by Mrs. Julia B. Hoitt, entitled, "Sacramento's Welcome to the State Teachers' Association:"

O, sowers of the gracious seed
Whose harvests slow appear,
We come, with hand and heart and voice,
To greet your presence here.

We know that hearts aweary grown,
With hopes and courage fled,
By friendly counsels girt anew,
Press on with buoyant tread.

Though oft a barren, fruitless soil
Seems to your portion given,
Unwavering at your stations stand;
The increase comes from heaven.

And so, God speed you on your course,
Nor lay your burdens down,
Till truth shall gain her righteous place,
And you, your victor's crown.

"The Relation of the University to the Public School," by Horace Davis, President of the University, was then read. It is impossible to give in a brief synopsis a fair presentation of the scope of this important paper. It discussed, in a broad and catholic spirit, some of the most important educational questions of the day.

Frank Morton, Principal of the Boys' High School, San Francisco, read a "High School Criticism of Grammar School Work." The essay was able and interesting. His chief points were: Brief statement of the function of the High Schools and consequent requirements in preparation; comparison of High School requirements with requirements in other vocations; general faults deduced from foregoing considerations; quality of work done by Grammar School teachers, and their shortcomings in appreciation of the true object of education; special faults in special subjects—reading, poorest; lack of moral training in the Grammar School—the perfect teacher; summary and conclusion.

A discussion followed, in which Albert Lyser, of San Francisco, and S. A. Chambers, of Oakland, participated.

E. T. Pierce, Superintendent of Schools of Pasadena, read an essay entitled, "Grammar School Criticism of Primary School Work." He made the following points:

We have too great a gap between the Primary and the Grammar School.

In the Primary we make instruction the chief end, leaving the real education to begin in the Grammar School.

The present arrangement of subjects is faulty, and the strict adherence to it retards the progress of the child and fails to interest him.

The work of the Primary School is too easy, and therefore (a) does not give sufficient scope to the mental activities of the child, and (b) does not furnish sufficient food for mental growth.

We attempt to carry kindergarten methods too far.

By helping children over difficulties they fail to acquire the desire or ability to work, and little foundation is laid for self-help, self-reliance, and perseverance.

The Primary fails to give a symmetrical development of the mind.

In regard to individual subjects, we fail in arithmetic, (a) to teach enough of the practical parts of the subject during the first years, (b) to give enough mental work, (c) to secure

a ready proficiency in the fundamental rules; in reading, we teach words and not the ability to grasp thought from the printed page; in language we have too much mechanical sentence making, and do not give the power to express thought readily; in geography we have too much map study and map drawing, and do not teach a knowledge of the life of the globe.

Our primary curriculum lacks in comprehensiveness, and therefore (a) fails to sufficiently interest children in school, and (b) leaves them at their entrance into the Grammar School with little knowledge or love for the most interesting part of school work.

This paper was ably discussed by Miss M. G. Pierpont and others.

AFTERNOON SESSION.

The Convention reconvened at 1:30 p. m., when Prof. Albert S. Cook, President of the Association, delivered his annual address. It was of considerable length and very comprehensive. In closing he said:

Let Boards of Education and Principals seek for character in the teachers they employ; insist upon it as a prime requisite, and discharge teachers who haven't it.

Before beginning to teach, or as soon thereafter as possible, obtain the broadest, deepest, most human education within your reach. One is not even prepared for teaching arithmetic and geography by the study of these branches alone, much less for the task of rearing up healthy, intelligent, generous, sweet natured men and women.

Maintain your interest in the noblest thought and purest sentiment by actively supporting the Teachers' Reading Circle, or whatever agency brings the best education to your doors, asking you to participate in its advantages there, at your own fireside, and in your own neighborhood.

Teach the best literature in your schools that your pupils can understand. They can understand more than you give them credit for, perhaps more than you are capable of understanding yourself.

Introduce the Bible into the schools, in the least objectionable manner, as soon as public sentiment and Boards of Education will allow. Try to live by its best and purest teachings and induce your pupils to do the same.

Bear in mind the threefold nature of your pupil. Do not stunt the rest of his body in order to cram his brain, or enforce his moral nature for the sake of 87½ instead of 87¼ per cent in examination. Give his affections and love of beauty a chance. He will thank you for it by and by.

Cultivate the spirit of brotherhood with your fellow teachers, and with all the world. Do not bury yourself nor allow yourself to be buried. Come out into the sun, and get warm; if there isn't sunshine enough to go around, try the experiment of contributing a little of your own.

This address was referred to a special committee with instructions to report the following day.

James G. Kennedy, President of Cogswell Polytechnic College, was down on the program for an essay, "What Would be Gained by the Incorporation of Industrial Training with the Public School System." In his absence the following synopsis was read:

Industrial training defined.

Under this head I shall attempt to show the growth of industrial work in the public schools; the industrial side of each study as distinguished from its academic side; in a word, point out clearly what is included in industrial training.

Does there exist a necessity for the incorporation of industrial training with the public school system?

It is my intention to show that there does exist a necessity for this industrial training, and, in obedience to this necessity, the public schools have changed the course of study so as to meet this demand.

The advantages arising from the introduction of industrial training into the public school system.

Industrial training necessary to the development of the whole child—physically, mentally, and morally.

The introduction of industrial training enables the child to do more intelligent work in all of its studies, because through this work the mind becomes more exact in its operations.

Industrial work gives variety to school work, and thus renders it more interesting.

Industrial work, if of the right kind, more largely than any other kind of work develops the judgment, the taste, and the originality of pupils.

It improves the work in their other studies, because it makes the mind more exact in its operations.

Industrial training better fits the child to enter successfully upon its life work.
Lack of moral training in the Grammar School.
The perfect teacher.

Fred. M. Campbell delivered an address on "What Would be Sacrificed by the Incorporation of Industrial Training with the Public School System?" The general drift of the paper was in opposition to the adoption of manual training into our school course.

At the close of Mr. Campbell's address, reports of standing committees were called for. The report of the Committee on Place of the Next Meeting recommended two sessions in 1889—one in July at Pacific Grove and another in the winter at Los Angeles. The report was adopted.

The Committee on Nomination of Officers reported the following:

For President—Prof. Ira More, of Los Angeles.

For Vice-Presidents—D. C. Clark, of Santa Cruz; E. T. Pierce, of Pasadena; M. Babcock, of San Francisco; C. H. Murphy, of Visalia.

Secretary—Mary E. Morrison, of San Francisco.

Treasurer—James T. Hamilton, of San Francisco.

The report of the committee was adopted and the persons elected as specified.

EVENING SESSION.

The Committee on Legislation presented the following report, which was received. At a subsequent meeting it was taken up and after discussion amended to read as follows, and then adopted:

First—That a law be passed providing for the division of the State into three or more Institute Districts, and for the appointment, by the State Board of Education, of an Institute Conductor for each district, at the annual salary of \$2,000, and traveling expenses.

Second—A law empowering County Boards of Education and City Boards of Examination to grant certificates and fix the grade thereof, upon certificates granted in any city or county of this State.

Third—A law empowering the Executive Committee of the California Teachers' Association to have all printing of the association (including the proceedings of all its sessions) done at the State Printing Office.

Fourth—A law granting a pension of \$300 per annum to any teacher who has taught thirty years in the public schools of this State, such pension to be granted only upon retiring from active work as a teacher.

Fifth—A law proposing to amend the State Constitution by striking out from Section 7, Article IX, of the Constitution, the following: "The County Superintendent and the County Boards of Education shall have control of the examination of teachers and the granting of teachers' certificates within their respective jurisdictions."

The committee also recommend the passage of the following Act:

Whenever there shall not be sufficient money in the School Fund, or funds of any county, or city, or city and county, in the State of California to pay the properly audited warrants upon said School Fund or funds, the Treasurer of such county, or city, or city and county, is hereby authorized and required to pay such warrants out of the Swamp Land, or any of the Sinking Funds, or any other funds of such county, or city, or city and county, which are not immediately needed for the payment of demands against them. Said warrants shall be held as vouchers by the Treasurer in favor of the fund or funds out of which they have been paid, and shall be repaid by the transfer of a sufficient amount of money from the School Fund or funds as soon as any money shall come into said School Fund or funds, after the payment of such warrants.

They further recommend that the association appoint a committee to present such of the foregoing suggestions as it may approve to the Legislature at its coming session; and further, that a similar committee, appointed by the County Superintendents, be requested to confer with our committee to the end that the educational bodies of this State may be united in their requests to the Legislature for improvements in our school laws.

S. D. Waterman, of Stockton, answered objections he had heard charged against the public schools.

He was followed by J. B. McChesney, of Oakland, who claimed that many of the objectors to the public schools were quite similar to those people of ancient times who supposed the sun's light was withheld during an eclipse because of the anger of some spirit. They did not understand the phenomenon, so they attributed it to some cause of which they knew but little.

Rev. C. D. Barrows, of San Francisco, followed with an eloquent address upon "The Moralist's Criticism of the Public School." He claimed that it was entirely within the province of the public school to teach those great central truths which underlie all Christianity, and upon which the moral code was bound.

A. L. Mann, of San Francisco, replied. He claimed that it was impossible for a child to receive the instruction and discipline in the cardinal virtues which the public schools give without receiving at the same time a moral education.

THIRD DAY.

The exercises opened this morning with a discussion on Industrial Training, in which C. J. Flatt, Vice-Principal of the Los Angeles Normal School, and Prof. D. A. Hayes, of the University of the Pacific, participated.

Mr. Flatt took strong ground against the general introduction of such training in the public schools, and Professor Hayes directed his remarks more particularly to a defense of the study of Latin and Greek. His address was both eloquent and masterful.

The Committee on "Curriculum of Grammar and Primary Schools" presented an elaborate report, which was listened to with great interest.

AFTERNOON SESSION.

D. C. Clark, President of the State Teachers' Reading Circle, presented his annual report. While this report did not show that the teachers of the State had been enthusiastic supporters of the Circle, still there was considerable reason for encouragement for the future. He made a few suggestions regarding changes in the workings of the Circle, which were referred to a committee to report as soon as possible. Said committee retired, and in a few minutes reported, recommending the following:

1. That nine parallel courses of reading be adopted.
2. That the President be permitted to name the Secretary.
3. That the Faculties of the State Normal Schools be requested to do all in their power to further the interest of the Circle.
4. That County Superintendents and Conductors of County Institutes also be requested to aid the Circle by presenting its advantages.

F. Slate, Assistant Professor of Physics and Mechanics of the University of California, read an essay upon the "Scope and Aim of the Elementary Teaching of Science." His principal points were:

Science has rightfully a place in the school curriculum, because it both affords mental discipline of a desirable kind not given so well by other branches, and opens up extensive fields of human thought and activity in the past as well as the present.

The mental discipline is, broadly speaking, on the lines of observation and reasoning upon phenomena. Mathematics is no substitute; its materials are abstract conceptions. Language equally fails.

The modern drift in education is towards maintaining vital connection between school

work and life. If persistent effort be made to explain every-day facts by the aid of knowledge that is already gained, we are aiding the healthful tendency, while we are doing the work best adapted to the age of our pupils; we are drilling in "organizing knowledge."

Experiments and laboratory work are valuable adjuncts. But they are of use because they make study objective; not mainly because they make pupils "handy." Manual training has its own justification and its own problems.

Laboratory work must be carefully brought into relation with ideas. Else we have habits of desultory and loose statement, and loose inference from inconclusive evidence.

This paper was discussed by S. P. Meads, of Oakland, Miss Belle Duncan, of Salinas, and Josiah Keep, of Mills College.

J. L. Wilson, Superintendent of the Schools of Colusa County, read an exhaustive essay upon "What Are the Respective Rights and Duties of Parents and Teachers in the Management of Schools?" His chief points were:

The problem in connection with the "Office of the School Trustee" is that of government in its broad sense.

The three forms of government—monarchic, aristocratic, and democratic—are naturally consecutive, and mark distinct successive steps in civilization.

The best form of government has been the question of the age; the above solution is the American conclusion.

In the discussion of the "Office of the School Trustee" the questions are the old ones of government—how shall its incumbent be appointed?—what powers shall he have? *i. e.*—shall it be monarchic, aristocratic, or democratic in its organization? (Aristocratic is here used in its old sense of government by a few of the best.)

In the infancy of peoples, they find it necessary to appoint a guardian over themselves, *i. e.*, an absolute monarch. In monarchies sustaining school systems, they are organized on this basis—the poor have no control, or limited control over their school. This is also true where the preponderating population are ignorant and incapable of managing their affairs, *viz.*: in Alabama the State Superintendent appoints the County Superintendent, who in turn appoints local Boards of Trustees. The same result is reached in other Southern States.

By the aristocratic form of government I mean not only that in which the power is placed in the hands of the few, but also that form in which the few are not chosen by the people governed. It is to be distinguished from the popular sense of the term.

Applied to the "Office of School Trustee," it includes the system wherein the township, including several districts, is the unit: Township Boards, either appointed or elective, hiring teachers and transacting all the business for the schools in the township.

The democratic system is that in which the people elect Boards of Trustees for their districts, with powers plenipotentiary.

It rests upon the idea that the people are capable of rearing their children and attending to their own business. With proper checks, it is the American idea, and that is equivalent to saying it is the correct idea.

The one Trustee idea.

The Trustee. What he is—what he ought to be.

I would warm up the school system with American sentiment, principles and patriotism, and leave it in the hands and hearts of the American people.

EVENING SESSION.

State Superintendent Ira G. Hoitt delivered an able address on "What Are the Respective Rights of Parents and Teachers in the Management of Schools?" He elaborated the following points:

The parent may demand that the teacher train the intellectual faculties of the child to such an extent as to make the mind an engine to do any work to which it may be called.

Exactness, thoroughness, and patience go to make a thinker; and the judgment, the power to weigh evidence, intellectual candor, thoroughness in search and accuracy in statement are the qualities to be developed.

The teacher should inspire in his pupils a reverence for justice, and teach them to enjoy pleasures by their temperate use and to abstain from evil indulgences. They should be made to feel that the indulgence in alcoholic stimulants is a most destructive evil.

The child should be made to know and to practice, as a duty, obedience to authority, and to feel penitence for wrong-doing. Pure thoughts and pure feelings should pervade the minds of the pupils, and moral thoughtfulness should be securely enthroned. The teacher and the school should discipline these moral qualities. They are more valuable than "all the stores of learning."

The child's individuality should be respected, and he should be taught the correct value of things.

The conclusion is inevitable that the parent has the right to require of the teacher that he cultivate the intellect, train the eye and the hand, care for the health, nourish the morals, arouse the patriotism, stimulate the energy, and exert every influence to return the child to his parents a self-respecting, self-reliant, law-abiding son or daughter, capable of doing something and being somebody: thoroughly imbued with such a moral influence as must command unhesitating and unequivocal obedience to law, induce neatness, enjoin sobriety and temperance, require attention and industry, quicken the wits, promote respect for society, encourage independent thinking, create a love for the beautiful, exact loyalty to truth, and inspire a reverence for God. This much the parents have a right to demand of the teacher. It is the duty of the teacher to meet cheerfully and efficiently all these requirements.

C. C. Stratton, President of Mills College, read an essay upon "By What Method Can a Teacher Educate the Parent?" He assumed at the outset that the duties of parents and the rights of teachers are not fully recognized. The interests at stake are very great, embracing the present and future welfare of the child, and parents and teachers should work together for the common end. But we find parents withholding authority which legitimately belongs in the school-room, failing to sustain the discipline of the school, making disparaging remarks in the presence of students concerning the character, ability, or work of the teacher, withholding that confidence and information which are so essential in order that the nature of the child may be clearly understood and intelligently addressed.

These facts suggest the urgent need of some remedy. The parent as well as the child must be educated. But how? One will say, we must resort to the printing press. Another would have recourse to the lecture platform. A third would educate the rising generation, that the light of parental responsibility spread through the regular work of the school.

To my mind, none of these remedies promise an adequate remedy. If the teacher would command the reverence for his character and the respect for his opinion and rights, which are accorded to the clergyman, the physician, and the lawyer, he must strive to rival these learned professions, in the mastery of his chosen calling, and the extent of his attainments. As a rule, men are taken at their worth, not in this calling or that, but at their intrinsic worth. The lawyer's claims are regarded, because he can successfully manage our business, and the physician's because he can successfully care for our health, but not because of their titles or degrees. The teacher should be, from the start, the oracle of the school-room, and come to be the oracle of the neighborhood. The direct and the only road to this elevation runs by the way of thorough scholarship, adequate professional training, and a richly stored mind. Then, but not before, will professional character and pride and enthusiasm and success command the neighborhood as they command the school-room.

At the conclusion of Dr. Stratton's address, the Association adjourned.

FOURTH DAY.

The exercises of the Association opened this morning with a paper on "The Kindergarten in the Public School," by Mrs. Sarah B. Cooper, of San Francisco. This address was listened to with absorbing interest by the audience, and all were deeply impressed with the belief that Mrs. Cooper saw in the kindergarten wonderful opportunities for good. The key note of her address was the prime necessity of educating all the fac-

ulties of the child symmetrically. Her paper was unanimously indorsed by a vote of the Association.

This was followed by a paper entitled "Making our School-Rooms Beautiful and Attractive," by Miss Fidelia Jewett, of the San Francisco Girls' High School. The subject was admirably treated, in fact the paper was something so unique and discussed a topic of such vital importance to our schools that the Association desired its publication in the "Educational Journal." At the close of the paper, President Cook stated that he desired to present a large photograph, suitably framed, to that school which should make the most improvement in school-room decoration during the next six months, the award to be made by State Superintendent Hoitt at the next meeting of the Association at Pacific Grove.

The Committee on Resolutions reported the following, in addition to several others, extending thanks to all who in any way had contributed toward making the Association a success:

Resolved, That it is the sense of this Association that the best interests of the schools of California demand that kindergarten instruction be made a part of the common school course, and to that end we recommend that children be admitted to the schools at the age of five years.

Resolved, That the President of the Association be instructed to appoint a committee of five, whose duty it shall be to investigate the subject of manual training, and report the results of their investigation, and, if found feasible, a plan for its incorporation into the schools of the State.

Resolved, That we recognize the importance of the State Teachers' Reading Circle as an educational factor; that we heartily indorse the movement; that we earnestly request all County Superintendents to present the subject of the Reading Circle at their County Institutes, and urge upon their teachers the advantages to be derived by pursuing the course of study.

Resolved, That we reaffirm the resolution passed at the last annual meeting requesting the Board of Regents of the State University to establish a Chair of Pedagogics in that institution.

Resolved, That we publish and distribute to the members of this Association the proceedings of this meeting and of meetings to come; to this end that a committee of five be appointed by the Chair to determine ways and means to publish the proceedings of this meeting.

Resolved, That the Chair be instructed to appoint a committee of nine to incorporate the California State Educational Association, and that said Association, when incorporated, shall require a life membership fee of not less than \$10, and an annual fee of not less than \$1.

Resolved, That we urge upon the Legislature the importance to the youth of California of a law prohibiting the sale of cigarettes to minors.

Resolved, That this Association learns with regret of the retirement of Mr. James Denman, of San Francisco, from the profession of teaching, which he has adorned for two score years. That we assure him that his services as member of the first State Convention held in 1853, and of every State Convention that has assembled since that time, as President of this Association, as Principal of the first free school in San Francisco, as Superintendent of that city for three terms, and as Principal of the Denman School for thirty years, will never be forgotten. That we congratulate him upon the good fortune that enables him to retire from the arduous work of the school-room while he is still vigorous in mind and body, and hope that he will continue to give us the encouragement of his presence and the benefit of his counsels for many years to come.

Resolved, That we have heard with feelings of profound regret that our former Secretary, Miss May Madden, has gone from this Association to take a life membership in one toward which many of our hearts yearn with untold longing, and that we extend to her in her new relation our hearty congratulations and best wishes.

Resolved, That we recognize liquor saloons as schools of vice, directly opposed to all the ends sought by our public school system, and that we believe all teachers should, by precept and example, labor in accordance with this belief.

Resolved, That in the death of George Tait, who was for several years a leading educator in the State at the time when such services as he could render were of great value, the profession to teaching has lost an active friend and the State a useful citizen.

The President appointed committees in accordance with the above resolutions.

The incoming officers were then installed, after which the Association adjourned.

STATE TEACHERS' ASSOCIATION FOR 1889.

The meeting originally set for the last week in December was postponed, on account of the inclemency of the winter, to March, 1890.

The Association assembled on the eighteenth of March at Los Angeles, Prof. Ira More, of the Los Angeles Normal School, being the presiding officer.

The minutes of the midsummer meeting, held at Pacific Grove in June, 1889, were read and approved.

Hon. Ira G. Hoitt, the State Superintendent, read a communication inviting the Association to hold its next meeting in the city of Stockton in December, signed by the City Council and other city officials.

A similar invitation was presented from the Educational Boards of Stockton City and San Joaquin County.

Mr. Atherton, of San Diego, presented an invitation from that city to meet there.

It was moved that the matter be laid on the table, to be taken up later. Carried.

The chair appointed Committees on Music and on Resolutions.

The following special committee was appointed to draw appropriate resolutions relative to the late J. L. Wilson, Superintendent of Colusa County: P. M. Fisher, Ira G. Hoitt, C. H. Murphy, Miss Vivian, Miss Murphy.

TELEGRAPHIC GREETING.

The following telegram was read:

LAWRENCE (Kan.), March 18, 1890.

President State Association, Los Angeles, Cal.: Please present my hearty greetings, hoping for reunion at St. Paul the coming summer.

J. H. CANFIELD,
President National Educational Association.

After a short recess, on motion of C. H. Murphy, of Tulare, it was resolved to set aside an hour during the session as a memorial in honor of the deceased J. L. Wilson, when appropriate exercises will be held.

Delegates to the National Convention to represent the California State Association were then appointed.

AFTERNOON SESSION.

The first exercise on the program for the afternoon was the annual address by President Ira More.

PROFESSOR MORE'S ADDRESS.

It is well to pause at times and look backward to see the history we have made in the past, and by it to forecast in some measure that which we are about to make; not, however, to make definite plans and expect to realize them. Life is made up of the unexpected, and our future has about it something of the uncertainty of a California rainy season. The educational prophet and the weather prophet are alike swallowed up by the flood of unlooked-for things.

Time was when the public schools were simple. Reading, a little arithmetic, a little geography and grammar, formed the whole curriculum. But great possibilities are open to him who reads, and the multiplying needs of men call for a wider culture of brain, as well as for a more perfect handiwork. The manual dexterities are separating, and we have blacksmiths, and silversmiths, and carpenters, and shipbuilders. But the brain work is all confined to the same public school, and the studies are piled on. Arithmetic grows into algebra and geometry; geography spreads into physical geography, with geology and mineralogy added; grammar, no longer content with dry language forms,

called parsing, seizes the living language, and inhales a spirit into dry bones; it becomes language teaching, and deals with living authors, expanding into rhetoric, literature, and oratory. Chemistry creeps in, and the celestial study, astronomy. And shall man know nothing of himself? Physiology, an epitome of all sciences, and psychology must have place. And the school staggers under the immense added weight, and the schoolmaster, in despair of mastering these many things, becomes, a superficial ignoramus or an encyclopaedia.

Nor are we at the end of this piling-on process. It has been discovered in these days that boys do not take quite kindly to the saw and the plane and the hammer, to the plow and the pruning shears, or to the miner's pick and shovel; that the girls love fine clothes and novels and shopping expeditions, rather than the household kitchen, with its never-ending rounds of dishes to wash; that they disdain to marry honest men as poor as themselves, and help to make a living in the world, but must have carriages, servants, and all that. A great evil this, in so far as it is true, and we are charged with the duty of correcting it. We are to give manual as well as mental training, to teach all trades, to make the school house a miniature university of workers in wood and metal, of bread makers and wielders of the needle, of cultivators of the soil and orchardists, of miners, typesetters, and engravers.

Then the professional reformers have learned that time is wasted upon the old, tough, hardened sinners, and have turned their eyes to the schools, and demand that the teachers shall give so much of their time to this or that enormity or social wrong, that little time or strength is left us for anything else.

Do not understand me as being in despair over this matter. There is a good time coming, and I think that our eyes may almost see the beginning of it. We may learn a lesson from the manual industries. Once upon a time, a man builded his own house, made his cooking utensils, cultivated the soil with implements of his own making, raised the wool that he made into clothing for himself and family, and slaughtered his own beef and pork. But when civilization called for nicer workmanship and greater variety, how gloomy the prospect! Can he possibly master all these things? But no, the division of labor comes to his aid, the work that he did is shared among a hundred people, and he now lives better by doing one thing well than formerly by doing a hundred things poorly.

We are now at the worst of our estate. Already special schools have lifted from our shoulders the professions; and we can easily see that in the not distant future technical schools will have relieved us of the sciences, one by one, and of all the manual industries. There will be schools for every department of wood working; every metal will have its special workshop. Cooking will have a school of its own, and no art is in greater need of one. And the study of all forms of life injurious to the special forms which minister to our wants, will have a school for the training of special students. While the public school teacher will be limited to the development of mind and body up to the strength required for the quick and intelligent mastering of the special line of work which the student may choose.

History easily shows us backward as well as forward steps in the past, even in the most progressive ages. We have made some such retrograde progress in California public school matters. The relegation in 1880 of all power to the several counties was such a step. Instead of one system, we have more than fifty systems. Each county fixes its own standard, holds its own examinations, chooses its own text-books, and if churlishly disposed, makes it more difficult for a teacher to enter it from another county than it is for a wild Chinaman to find entrance to the United States. A single dishonest clerk broke up the State system; but the Legislature at the last session was actually obliged to make a law to prevent members of County Boards from directly fitting applicants for certificates, to pass examinations on the questions which the same County Boards were about to make out. Instead of doing away with dishonesty, we have multiplied its opportunities. A tendency to return to the State system is quite strongly marked, but a constitutional provision which stands in the way is a serious obstacle, and the time may be long deferred. But it is surely coming. In fact, at no distant day we may look for a national system of education, and then in no portion of this broad land will the masses of the people be masses of solid ignorance.

Another step backward is the practical orphanage of High Schools. They are not children of the State, but step-children; not provided for, but allowed to exist, subject to the capricious will of the localities in which they are placed. The need of these schools, and the good work done by them, has fortunately kept their number from diminishing in the past ten years, but they have not increased as they would have done under more fortunate circumstances. The State takes just pride in its University and in its Grammar and Primary Schools; in the top of the broad staircase of learning, and in the bottom of the same; but cuts away the intermediate steps. The Grammar School Course is but a sorry substitute for piecing the two ends together. It isn't long enough, and the wood is weak and splintery, instead of the solid oak. I believe that with combined and vigorous effort on the part of the educators (and are we not all equally interested, whatever our position?) will bring the State to the more liberal policy of setting the High School once more in its place at the family fireside.

The University is the head of the public school system and should look down and take a lively interest in all the lower grades; as Quintilian, when he would train an orator, the highest type of intellectual manhood among the Romans, commences with the earliest primary instruction; not that the schools should be subservient one to another, or under the supervision one of another. There are three units, articulate; that is, they

may be joined at the ends but not fused nor overlapped. The Grammar School should be perfect in itself, not a preparatory department for the High School. Nine tenths of its students will end their work there, and should do so. The High School should be complete in itself. Nine tenths of its students will go out from its walls to the work of the world, and properly. It is a wrong for the High School to set up an ideal standard of fitness for admission, and compel the Grammar to become a fitting school, and equally so for the University to compel the High School to swerve an iota from the course of study which will best fit the student for entering into active life without further preparation.

It is somewhat curious to note the enormous change that has taken place in the college, or university, as it is now more popular to call it, within a comparatively brief period. Forty-two years ago Abbott Lawrence gave \$100,000 to found a scientific department of Harvard. Until then the food of college students was Latin for breakfast, Greek for dinner, and a mixture of the two, with a spice of Hebrew, for supper. English studies were almost entirely neglected. Any learning less than two thousand years old was looked upon with suspicion. Lawrence's gift was an entering wedge. Could the conservative faculty of Harvard have suspected the upheaval to follow they would have thrown it into the sea. Yale followed with her scientific department; then Brown University, and Bowdoin. The heaven was working. But science must be taught in English, and possibly this neglected modern language held other things worth studying. Literary courses were established, and mixed scientific and literary. And while grave professors were proving, and not always with sweetness of temper, the vast superiority of their loved Greek and Latin, the American boys and girls had settled the question in a practical way. There is no logic like the logic of events. They had deserted the ancient classics, and swarmed into the classes engaged in modern and living work. At Berkeley, excluding the special schools of law, theology, and medicine, less than one seventh of the students taking regular college courses are upon the old classical course.

Our next advance needs to be in the teaching of morals. Did you ever notice the singular unanimity of opinion upon this point? Should I ask the question, what part of our work overshadows all the rest in importance, your voices would mingle in one: The building of character; truthful, honest, industrial, economical, merciful men and women. And the next day we go into the school-room and put our utmost energy into building the power of language, the power of numbers, of form; and leave the moral virtues to come in as incidentals. These things ought not so to be; and earnest, thoughtful teachers have long sought a way in which, while avoiding set lectures on morals, dull at all times to grown people as well as to children, should have a set purpose and a method in the imparting of moral instruction and the building of character.

We may not, as you know, give much definite religious instruction. The school law of California says: "No publication of a sectarian or denominational character must be used or distributed in any school, or be made part of any school library; nor must any sectarian or denominational doctrine be taught therein." We must not teach sectarianism; and it seems that every religious principle has been seized and a sect built upon it. One sect holds to immersion, another to predestination, a third to free will, a fourth to apostolic succession, a fifth to universal salvation, a sixth to miraculous healing—but time would fail me to enumerate the half of them. These sects have lost much of the bitterness of fifty years ago, but are still sufficiently set in their ways to make it warm for the unlucky teacher who should impart religious instruction in any manner varying from their religious belief. Only the universal may be taught. There is a God, in whose presence we stand, and to whom we are accountable for every action, and who gives a verdict, not as man judges, by the outward act, but from the intent of the heart. Further religious teaching than this is impossible, in a public school where every right of conscience is respected. When the State adopts a church, then will its catechism become a manual of religious instruction; but until that somewhat distant day arrives, he who insists upon religious instruction demands the impossible, and thus becomes, not the friend, but the enemy of the public schools.

But we must teach morals; the State demands it, and formulates a law, in somewhat loose but emphatic language: "It shall be the duty of all teachers to endeavor to impress upon the minds of all pupils the principles of morality, truth, justice, and patriotism; to teach them to avoid idleness, profanity, and falsehood, and to instruct them in the principles of a free government, and to train them up to a true comprehension of the rights, duties, and dignity of American citizenship." Let us define the obvious meaning of our legislators in framing this law: First—The moral includes the duty of man to his fellow man, to himself first, to his neighbor next, then to the sixty millions forming our country; and the law stops there, but we may add, to the human race everywhere. It is, in the best sense of the word, of the earth, earthly.

The religious deals with our duty to God, to love, reverence, and worship. Faith is its handmaid, and it gives promise of the life beyond the grave. It is of the heavens, heavenly.

While the moral and the religious are somewhat intimately connected, and are blended in every perfect light; still their elements are easily separable, and, according to that truest maxim of teaching, "One thing at a time," they should be taught: First, the moral, as a foundation on which all religious culture may be afterward built, then the religious. The State provides for the former, but is obliged to leave the latter to the family, the sectarian school, and the church.

A brief statement of the origin of the moral sense in man will suffice. God has placed him in the world the weakest of animals. His weakness drives him to combine with his fellow man and become gregarious. Now the necessity of living in bands compels

each individual to respect the rights of all others in the same band. You will observe that even when banded together for evil purposes, men are true to all others in the same company. Thieves and robbers are true to each other; the band can exist only while they are so. Take the wild Arab of the desert, whose hand is against every man outside the limits of his tribe, but within he is gentle and loving, true, and considerate. The American Indian is the most outrageous liar living—to all beyond his own tribe. White men live near them for years, and never hear a word of truth spoken; but they do not lie to each other. As men become civilized the band becomes larger, and the sympathies are widened, and the moral virtues—truthfulness, respect for property, respect for person, industry, economy, mercy—are extended to wider and wider circles, until we may hope that in some not very distant future time the whole earth may be of one brotherhood, and man's rights be everywhere respected by his fellow man.

The moral code is essentially the same everywhere, whatever the religious code may be. Whether the people worship the true God, or bow down to idols, the commands, "Thou shalt not kill," "Thou shalt not steal," "Thou shalt not lie," "Thou shalt be industrious," "Thou shalt be merciful to thy neighbor," are in all written and unwritten laws of Christian and Jew, Mohammedan and Zoroastrian, Brahmanist and Buddhist; for all men are under the same necessity of community dwelling. A pure religion is built upon a pure morality.

And this brings us to the teaching of morals in schools. Every teacher in his school-room has before him a community under the very best conditions for moral training. The vices of the world are here in little, as well as its virtues. The germs of every crime in the calendar are seen by the teacher in his daily round of duties; and every incentive to truthfulness, industry, and honesty that the world holds out to its citizens he presents to his little community. He needs to keep in mind constantly the moral bearing of every act; to draw from each mind and make permanent by habit its best impulses, and repress the worst, until each life shall conform, so far as in it lies, to the golden rule, which sums in brief phrase the entire round of moral duties.

Wanted—a measure of the teacher's success. Eminent teachers have always known that true education is power of judgment and thought and will. Plato knew it; so did Quintilian and Bacon. Now this thought is becoming real to the popular mind. Every educational magazine teems with it; and although the specious results of memory work or cramming still hold many in thrall, the beginning of the end of that vicious system is seen.

If you would do a thing easily, get the planet to help you; so we, when the powerful governments of the earth stand shoulder to shoulder to support and help on our work, must succeed. Prussia, crushed to earth by French valor, conceived the happy thought of regaining her lost power by educating. When a full generation of her sons had been trained, she whipped Denmark in the Schleswig-Holstein matter; Denmark educates. Austria is overthrown in six weeks in 1866. She wakes up, rubs the gathering film from her eyes, and educates. France receives with immense astonishment her drubbing in 1870, and her zeal in education almost outruns prudence. The Russian bear rouses from its hibernation, and calls for schoolmasters. Sweden, Norway, and Italy see their only chance for independence, and educate; and even England, safe from invasion, fears the loss of her manufacturing supremacy, and educates her masses.

The education thus undertaken with selfish intent has wide-reaching beneficent results. God overrules the selfish purposes of men. The nation that educates, whatever the aims and purposes, trains for liberty in the interest of the whole race.

Mr. James G. Kennedy, Principal of the Cogswell High School, San Francisco, next gave a very important address on "Industrial Education." He commenced with showing the need of a careful study of the basis of education—mechanical training. "In the infancy of the race," he said, "man was led to physical action as a means of gathering his food. Then came agriculture, barter, commerce, and mechanical pursuits. The first development of a system of expression was by sign-drawing. Other physical actions followed, and thought on the physical basis."

Mr. Kennedy explained the industrial methods of study as at present required in the best schools. In the San Francisco High School there is a three years course. He mentioned drawing and designing from original creative efforts of the pupils; then followed industrial art, Egyptian designs, wall paper designs, wood carving, metal work, "the boys learn the use of chisel, saw and plane, mortising and framing. Simple outfits only are required. Much of the work is done with a two-foot rule and a pencil.

"Next comes the iron shop. It is found that the best mechanic is the

best student. Boys from fourteen to fifteen years of age are engaged in wood work; from fifteen to sixteen, in iron work. Next they are taught to make machine tools themselves. Thus they become universal blacksmiths, learning the principles that underlie the work. In two hours the pupils gain all the instruction which they can properly assimilate in the twenty-four hours of the day. The study is very interesting, and it does away with the problem of school government. It is a fine method of training to test the perceptive faculties, originality, and judgment." Mr. Kennedy then explained the uses of the various designs, models, and tools exhibited.

Mr. N. C. Twining, of Riverside, read an essay on "The Spelling-book in School." He referred to Noah Webster's complete dictionary of the English language, and to his familiar spelling-book.

Closely following Webster came Dr. J. E. Worcester, then Hammond's Lexicography, and reference was made to pioneer publishing houses of established reputation.

"Some recommend," he remarked, "that the spelling-book should be banished from the school-room. Oral spelling is not proper spelling, it is description only. First, should come definition; second, correct use of the word; third, enunciation; fourth, description. The real object in spelling is to set a correct mental picture of the word. Use the reader.

"Should a child be shown his own mistakes? Educators differ on this point. Material for spelling is found in the reading lesson. All words likely to be misspelled should be written on the black-board. Spelling is unknown among the Germans. Spelling is nothing compared with the right use of words. The following are good rules: Let the lesson be conducted in reading. Don't let the pupils spell a word that they don't know anything about. Every word outside of the children's experience should be omitted."

After the essay, Mr. Hoitt's motion with reference to the place of the next convention was taken from the table. Several teachers, including one lady, expressed their views with reference to San Diego and Stockton. Finally San Diego was chosen by a unanimous vote, and all parties appeared satisfied.

The last essay of the afternoon was a paper on "Ornamental Trees and Shrubbery for School Grounds," by Mr. C. M. Drake, of Ventura.

He spoke of the great advantage resulting from gardens in school yards, enumerating many of the best varieties of plants. He explained the favorite manner of propagating and setting out plants, advising the use of tumblers for the tiny seedlings. The best methods of securing good results at a minimum of expense and trouble were pointed out.

One of the best essays of the afternoon was "The Spirit of the Teacher," by H. E. Cox, Vice-Principal of the Santa Cruz High School. He remarked that the spirit of the teacher should be the spirit of progress. "No dull or unpromising pupil should be turned out of school. The teacher should learn to love all her scholars. "It is not a question of government, but of reflecting the divine pattern." The entire essay was replete with excellent advice.

[EVENING SESSION.

In the evening the Association was tendered a reception at Turn Verein Hall, on invitation of the Los Angeles County teachers. The platform was beautifully decorated with plants and flowers.

A very entertaining program was rendered as follows:

Music by a quartet—"More and More."

Mayor Hazard then delivered an address of welcome to the Southland. He said:

This organization of teachers is an organization which means the enlightenment of mankind; which fits men for duty, and prepares him for immortality. It represents something greater, higher, nobler than any other human organization. By some it is believed that principles of government rest upon Legislatures and halls of Congress. Not so; but on the school house. These principles have been with us through good and ill report. These principles have been the guiding star of our lives. To you is intrusted an important charge. I am glad I was born in a government that divided a portion of its revenue for the support of schools. The jails and penitentiaries will become fewer because of the education of our citizens.

When it comes to the question of school houses for our children there is no difference of opinion. There is no organization that represents a greater idea, and the city could not be honored more than by receiving you to our firesides and our homes. To whom could we extend a more cordial welcome than to you? After you have gone to San Diego, of which city we are proud, we will invite you to return to Los Angeles.

Hon. Ira G. Hoitt, Superintendent Public Instruction, replied:

One year ago last December I stood before an audience, perhaps one fourth the size of the one present before me to-night, when an invitation was extended to hold the next meeting in Los Angeles. It was urged that it would do us good to come, and do the people good to have us come, and so we are here; and I feel that it is good to be here. We found that Los Angeles is next to San Diego, and the next meeting will be at the further end of the country. I believe that, while we are here, it is just as well to make the circuit of this part of the State. In this country every boy is born of royal blood, and is liable to reach the position of President. We should educate every one to such an extent that he may be an intelligent, moral citizen, and intelligence depends upon the loyal schools of the country. The teachers are in full accord in building up a fabric which shall stand so long as the sun shall shine.

Music—Solo.

Hon. S. M. White, of the State Normal School Trustees, made a most excellent and appropriate speech, eulogizing the teachers' profession, and enumerating some of the difficulties attending their daily work.

Music—Solo.

Prof. F. A. Molyneaux, of the Los Angeles County Board of Education, was introduced as "the man from Pomona." He made a humorous and brilliant speech, relating appropriate anecdotes. He also gave figures showing large and recent gains in the number of teachers, pupils, and school accommodations. "While we thank God," he said, "for these beautiful homes, it is not this by which our hearts are being stirred to-night. 'What then?' you will ask. I will tell you. It is your presence, your work, your cordial greetings. We welcome you to this valley of Los Angeles, which has been reserved to this era of civilization." A burst of eloquence ended his remarks.

Music—Solo.

The closing address was given by Superintendent P. M. Fisher, of Oakland. He made a number of telling points, which were well received by the audience. The Pasadena boom came in for its share of pleasantries in relation to real estate offices of the past. On arrival he first noticed the Salvation Army, and inquired whether this was the Committee of Reception. "You not only gave us this present welcome," said he, in conclusion, "but you said we must come down again to San Diego. I trust the days before us will be as happy as this one has been."

Music—Orchestra.

The Association then adjourned to meet in the Congregational Church Wednesday morning.

SECOND DAY.

MORNING SESSION.

The Association assembled at 9:15 o'clock, President Ira More occupying the chair. After singing under the direction of Professor Foshay, Mr. W. H. V. Raymond, Editor-in-chief of the State Series of Text-books, read an essay on "The Proposition of the American School Trust." The State Constitution was quoted, showing the object of education to be the preservation of the liberties of the people. He said:

Man is expected to read that he may become familiar with the laws and the political situation. The man must also have a disposition to read, so as to exercise his judgment on questions presented. A man may be politically intelligent when morally unsound.

Another specific result of education is to give moral direction and balance. Next to integrity comes industry, and a disposition to work is essential to good citizenship.

It must be admitted that the object of the trust has been but partially accomplished. The specific thing upon which success depends has been imperfectly achieved. The ideal results are not altogether possible to mankind. Some reasons for this are the general failure to look upon this matter as a business affair, and the prevalence of foolish notions relating to this purpose.

The demand is for machines rather than men. A machine is not a power, has not intellectual attainment and moral purpose. We may expect the teacher to have clear views. It should be the teacher's purpose to know the truth.

Automatic and other methods of strengthening the trust were mentioned in closing.

Mrs. Julia B. Hoitt, Deputy Superintendent of Public Instruction, read a valuable paper on "Educational Discoveries."

Great discoveries in the past have been the strong impelling powers that have sent our great world "spinning along the ringing grooves of change." All progress is the result of some discovery: First, the felt want; second, the study as to the best method of supplying that want; third, the "Eureka," I have found it, and the step forward, the final fulfillment of the need.

Education is as old as the hoary old world. From the time when Adam, being established in the Garden of Eden, received his divine instructions, the development of the world has taken place, step by step, through the discoveries advanced by the world's great thinkers. These steps have been gradual and oftentimes halting, but steadily forward, until humanity has reached its present intelligence, liberty, and goodness; and the way still opens before it to yet greater attainment.

* * * * *

The progress of education through the nations of antiquity was then traced.

Then Christianity dawned upon the world with its tiny but imperishable light. The glory of Rome came and departed. The dark ages shut down upon the world. Knowledge crept into monastic homes, and was nurtured by the priesthood, the knights, and the Mohammedans through that long winter of discontent, until it burst forth with its gathered strength in the spring time of the reformation. America was discovered. Civilization came with a rush, and deep thinkers of those years each brought some contribution of invention or discovery to swell the mass of growing knowledge.

So we find there are three periods in the world's history which may be considered as the three main discoveries which have changed the entire current of its destiny.

First—Christianity.

Second—The discovery of America.

Third—The Reformation.

In the train of these parent discoveries has come trooping down to us through all the ages a vast progeny, each of which has made the world move forward, though never so little.

Man's own powers, mental and spiritual, have been focused under this powerful lens of modern discovery, and unsuspected capacities have been developed.

The main subjects which comprise the field of *modern* discoveries in the educational world are:

1. The necessity of *universal* education as a means of establishing the stability of the government.
2. The establishment of three grades of education—primary, secondary, and university.
3. The endowment in the United States of Colleges of Agriculture and the Mechanic Arts.
4. School architecture and school decorations.

5. The introduction into our school curriculum of the study of civil government.
6. The advantage of uniform courses of study.
7. The need of efficient professional supervision.
8. The beneficial effect of Teachers' Institutes.
9. The necessity of professional training for our teachers.
10. The necessity of manual training for our children.

J. A. Woodson, editor of the Sacramento "Record-Union," was on the program for "Thoughts on Observation," but being absent, his paper was read by Thomas Kennedy, of San Francisco.

He urged the necessity of teaching a child to observe and perceive, and gave, as the opinion of a journalist, that the young man who can see, know, and comprehend what he has seen, with little other education, is better fitted for life than he who has a Yale diploma, yet cannot tell you whether the horse that just passed is black or white.

Mrs. Rice, of San Diego, gave a practical example of the working of the sol-fa system of vocal music. Two children were brought to the platform; one was from the first and the other from the second grade, and had never before sung together. So creditable was the performance that a unanimous vote of thanks was tendered Mrs. Rice and the children.

C. M. Ritter, of the Chico State Normal School, being absent, his paper on "Mathematics" was read by Prof. E. T. Pierce.

At the introduction it was urged that all educators should unite in demanding a Secretary of Education in our President's Cabinet. With unanimity of purpose he believed that this could be attained in one Presidential Administration.

The following is a summary of the points of his paper:

First—That altogether too much time is devoted to the study of arithmetic.

Second—That a large part of the so-called arithmetic should be eliminated from the course of study, the principles of percentage and interest being broad enough to comprehend all that is desirable in that department.

Third—That in arithmetic "shortest solutions and best explanations" should be sought at all times, both to be as much as possible the result of the pupil's own investigation.

Fourth—That the metric system of weights and measures should supplant the cumbersome one now in use.

Fifth—That elementary geometry, taught indirectly, should precede the teaching of mensuration, and as mensuration is of general utility, and as most pupils never enter the higher schools, that it should be taught in the Grammar Schools.

Sixth—That more care should be taken in setting forth the objects of the study of mathematics. There should always be an object in view on the part of both teacher and student.

Seventh—That the study of mathematics is an indispensable part of any complete system of education.

AFTERNOON SESSION.

As the Association was called together, the Schuman Quartet furnished vocal quartets.

"The Extravagance of Speech," by John Monteith, formerly State Superintendent of Missouri, was the first subject.

The mother tongue of our people is degenerating, as it is spoken throughout our land, so much so that he feared, that unless something was brought to prevent, it would be hopelessly beyond redemption.

We have no ancient monuments or temples, and our only legacy from antiquity is our language, and it is worthy of our respect.

A half century ago the names of our great leaders, Clay, Calhoun, and Webster, were revered by all classes, regardless of political parties; yet on a recent twenty-second of February the speaker noted a placard displayed in a store window, "Closed on account of Georgie's Birthday."

"Can it be that we as a people may not have a single name in history that is not nicked?"

The fast young lady would speak of that notice as "awful funny," the dress of the passer by as "awful fine," and the minister's sermon as "awful flip." She watches

a beautiful sunset, and pronounces it a "perfect daisy," and after a trip to Niagara, declares it "too cute for anything." Among the American people there is a widespread lack of reverence for language as an institution.

Again, we are a witty people, and commit the thoughtless sin of making our language not the instrument for legitimate wit, but itself the material.

And the higher class adopt the language of colloquial discourse from the vocabulary of the street.

In Europe pure language is spoken by royalty, and this is imitated by the lower classes. Here no such condition exists. The time when the teacher or pastor set the model for language has passed, and in lieu of this has come the language of the street.

The influential class sets the type of speech. This class is that which has the greatest wealth, and not usually the greatest education, and their influence is nowhere greater than in speech.

The American people have two donkeys that they ride to death, "and" and "got." "Why, I have watched a cultured lady, and in six minutes she used the word 'and' fifty-two times." There is a dearth of vocabulary in spoken language, and we are too apt to relegate all that is beautiful or powerful in our speech to writing, using but the barest skeletons for the every day communication of thought if thought there be.

The word "boom" originated with the "Globe-Democrat" at the Grant campaign; what it has come to mean, most of you know, but still we hear of a "boom in dress," "boom in money," and alas! "a boom in affection."

The standard for pronunciation is not the same in all parts of the country. Start with "calf." In Boston it is "cahf," in Ohio "caf," in Arkansas "cafe"—flat and all tired out.

The teacher may give careful instruction in grammar, and that bright lower-ward boy will pick out every principal part and adjunct, but at recess he rushes to the grounds with a "Bill, you haint got no cigarette stub you haint usin', have you?" The home is against the teacher. The people must be elevated.

In conclusion, he remarked: "Education is called the great devil-killer. I have noticed a few of the most prevalent devils, and I exhort you teachers to rise in your might and slay them."

After recess the following officers were unanimously chosen for the ensuing year:

President, James G. Kennedy, of San Francisco; Vice-Presidents, D. C. Clark, of Santa Cruz, Eugene de Burn, of San Diego, Mrs. A. L. Mann, of San Francisco, W. W. Seaman, of Los Angeles; Secretary, Mary E. Morrison, of San Francisco; Treasurer, Joseph T. Hamilton, of San Francisco.

Mr. D. C. Clark, Principal of the Santa Cruz High School, described the origin, growth, and usefulness of the California Teachers' Reading Circle. The several courses of study and the books required were enumerated. The encouraging results already attained were specified, and an appeal was made for a larger membership. Reports of its progress in several localities were read.

State Superintendent Hoitt also spoke in favor of the Reading Circle, and described the plan of securing the erection of a building in San Francisco, to which all teachers may resort. It will have a large hall, small halls, and stores, which will bring in a handsome income. There will be an excellent educational library and appliances of every description used in our school system. Mr. F. A. Molyneaux, of Pomona, and Miss Adelene Beshen, of Stockton, were elected as Councilors. Mr. Hoitt referred to the raising of the American flag over school houses throughout the State.

State Superintendent Hoitt, as Chairman of the Committee on Incorporation, explained the plan contemplated.

It is desired to form a company, with capital stock of \$250,000, divided into 50,000 shares. With this money it is proposed to build, in San Francisco, a teachers' hall, which shall contain assembly rooms, offices, and other apartments for rental, together with library and reception-rooms, which may be a rendezvous for all teachers of the State.

His report was filed, and the Association then adjourned.

EVENING SESSION.

Prayer was offered by the Rev. Dr. Hutchins. Superintendent Will S. Monroe, of Pasadena, after brief introductory remarks, gave a lecture on "Language Teaching in the Primary and Grammar Grades."

"Copying," he said, "has to do largely with the first school year of the child's life. It is of value, in that it gives the child something to read; and it is also valuable for spelling words." After quoting from Herbert Spencer, the Professor remarked that "spelling should be like a muscular exercise—sinking at an early stage into automatic action. The same is true of penmanship and all the mechanics in language. If the pupil is to become a writer he should have training in this subject. Second, dictation may begin in the latter part of the first school year—i. e., when the child is six years of age. In dictation you review the studies of the first year, and teach the use of capitals, punctuation, and spelling. It will serve as an aid to the child's vocabulary, and as a training in memory.

"I begin with the second year. I put on the board a paragraph, and the children will be expected to write from dictation letter forms, receipts, and bills. This is simply a dictation exercise. Third, reproduction should form the basis of language—a part of the language work. Drawing may begin in the third school year. It should be continued from the fourth to the seventh year. The child must have something to write about, but do not expect him to 'make a composition.' Early compositions on such subjects as 'The Cow' and 'The Dog' are the bane of school life. It is your duty to interest the child in his studies. The distaste for compositions in former years was for two reasons: Because the children had nothing to write about; and, because they did not know how to write. Had my teacher allowed me to reproduce a little story, language work would have been a delight; but it was a positive bore.

"Now, what I would like to say to-night is, that you should give the child something to write. It may be the battle of Bunker Hill. Give a list of the words they will be likely to misspell. Follow up historical stories day by day. These materials will lead to natural composition. 'The History of the Boston Tea Party' and the 'Boys of '76' furnish good material. A great many books may be selected for this purpose—'Seaside and Wayside,' for instance.

"Whatever line you take up, follow it awhile. If the subject is insects, let stories of insects follow right along. The terms in one lesson will often reappear in the next lesson, and they will become familiar from repetition. Other interesting books are Mrs. Mann's 'Little Flower People,' and 'Our World,' by Mary L. Hall; also, 'Seven Little Sisters.' Before taking up a subject be master of it yourself. I have found that most people are not good story tellers, hence the need of a book.

"Interline new words. In the higher grades, where dictionaries are in the room, they may be referred to. If to-day the lesson is about a crab, to-morrow it will be the crab's home; on the next day the food of the crab. Establish some connection between the lessons of to-day and yesterday. If teachers have one burden greater than another, it is correcting written work at home. Instead of this make corrections with the class. Correct the errors common to the class, and let your criticism fall on that one line till the errors disappear. Dwell upon the criticism till the error is no longer made. How often I have wished there was some one to write the teachers' 'Song of the Shirt.' Mark, mark, mark, till the eyes are so fatigued and the body so weary that on the next day the teacher is poorly prepared for work. No Superintendent has a right to load this burden upon you. My own teacher may have spent an hour upon my composition, but it made little difference to me.

"If the work is careless, tell John or Jennie to do the work over again. Preserve neat work. It is an added stimulus to do good work. If the children know the work is to be sent to me at the office, they are more careful. Every child is expected to have one drawing in every lesson. The reproduction work may be on reading lessons, history, or any branch of study. The history of a poem, with pictures illustrating it, will be very interesting. 'Evangeline' may be treated in this manner. The pupils should write all they remember of the poem."

Mr. Monroe related his successful experience in taking charge of a class that had been backward in literature. He asked them to make the exercises a basis of writing, and there was no further difficulty.

Teachers should remember that they are dealing with minds untrained and undeveloped. What we are to aim at is to give them thoughts, and let them state the thoughts in their own language. Some teachers say they have no time for this. You must have time for language work from the first year up. As to the use of text-books in grammar: The diagram may take its departure from the school-room, never to return. The place for technical grammar is insignificant in comparison with writing beautiful English. I say English may be taught, and well taught, without a technical grammar. We can and must give our language teaching a lively interest. If they are not interested, it is owing to our stupidity and not theirs. I am not making war on the grammars. I want to place them (as President Eliot says) in our High Schools and Universities. Let the book slumber in the dark as a book of reference.

THIRD DAY.

MORNING SESSION.

After a piano duet, Dr. Walter Lindley, Director of the California Reform School, read an instructive paper on "The Reform School."

This was followed by a paper on "Technical Education," by Miss Helen Cooley, of the Los Angeles Normal School. She gave an outline of the origin of technical teaching in the old system of apprenticeship, and referred to the success of French and German chemists; to the discovery of the coal tar colors abroad, and to the early days of technical training in Massachusetts. The Institute of Technology in Boston and the Lowell School of Design were described, with references to the several branches of study pursued. She showed that several of these industries are specially adapted to women, and many of them secure advantageous situations after graduating from these schools. The wealthy classes usually oppose technical training, while the poor often warmly favor it.

Miss Margaret Schallenberger, of the San José Normal School, gave a very interesting account of "Clay Modeling." She said:

There are technical schools in most of our large cities. As a whole these schools are a grand success, and new ones are being born almost daily.

Some persons think there are too many studies already. The wealthy classes protest against teaching trades and fine arts. The chief object of this training is the expression of thought through the hands. It means investigation; it makes men and women; it prepares for active life and not for examinations.

Clay modeling should be tried in all our schools, as it has a general adaptation for all branches of education. Training the hands is a great addition to the child's mental furnishing. The true end of education is to give the child ability to acquire knowledge. If we wish to give mental and moral power, the whole boy must be put to school. Long before a child can reason he can observe, and should be taught to observe with accuracy. Perception in many persons remains in an immature condition all their lives. Clay modeling possesses peculiar advantages, developing observation, thought, and expression. By modeling forms in clay the pupil makes use of his observation; and this is the best method of teaching expression in form.

What better method can be found for developing the sense of touch? Pupils should be trained to see, in order that they may see better. Clay modeling fails of its object if the teacher does not lead her scholars to observe forms in nature and in manufactured articles. Drawing is not so real: it is a sort of deception, being on a flat surface. Modeling teaches judgment, the forerunner of reason; it also teaches imagination. It even helps in reading and spelling. A child thus trained sees that the words do not look alike. Geography has to do with forms almost entirely for awhile. The aid of modeling in teaching to draw is obvious; in language training also it is of immense value. We know words enough; we don't know how to use our words. Arithmetic is an exact science, and geometrical forms assist in this study. Patience and care are developed by modeling, and close attention is secured. As children enjoy modeling it is of more advantage to them than uninteresting studies.

The clay costs only two cents a pound; good tools, twelve to fifteen cents. I never destroy a child's work in his presence. Clay is peculiarly adapted to the hands of little people. Mistakes can be more easily corrected in it than in other substance. Clay modeling is the beginning of the whole range of plastic art.

Rosamond R. Johnson, of Oakland, President of the California Woman's Christian Temperance Union, was introduced to tell "Why Temperance Should be Taught in our Schools."

The character of the American citizen should be engrafted with industry, honesty, integrity, obedience to proper authority, and total abstinence from all that intoxicates.

It is noble to raise the drunkard from the gutter, but far nobler to prevent the creation of drunkards. And there is no way to do this so successfully as by giving the child a knowledge of the influence of narcotics and alcoholics upon every tissue of his organism. The work of child-saving devolves upon the public school, and, with earnest teachers, these can be made the bulwarks of the nation.

"A fine flock of sheep," said the traveler to the shepherd.

"Yes," was the reply, "we take care of the lambs."

America must care for her human lambs, would she not see them sacrificed to crime and destruction.

Our nation has no other strength or hope than the intelligence and virtue of the individuals that compose it. For the intelligence and virtue of individuals there is no other human assurance than laws providing for the education of the whole people, and these laws themselves have no strength or efficient sanction only as they coincide with divine law.

Every loyal citizen should desire to be among the foremost and boldest to exemplify and uphold whatever constitutes the happiness and the glory of our nation.

The real mission of the public school is to train American citizenship, and the highest type of citizenship is that based upon virtue, pure morals, and Christian integrity.

AFTERNOON SESSION.

The first exercise was a paper by S. D. Waterman, Principal of the Stockton High School, entitled "Enthusiasm as an Element of Success." In the absence of the author the paper was read by P. M. Fisher, Superintendent of Alameda County.

Next came memorial exercises in honor of the late Superintendent Wilson, of Colusa. Superintendent P. M. Fisher, of Alameda, presented the following resolutions:

WHEREAS, Infinite Love has deemed it wise to take from earth our loved friend and brother and co-worker, J. N. Wilson, be it

Resolved, That, though we recognize his ripeness for immortality, we deplore the loss of the man with heart of honor and tongue of truth; a friend tender and true, unselfish and devoted; a teacher aglow with the fervent heat of enthusiasm; a public official faithful to the common good.

Resolved, That in the contemplation of this life laid down in the prime of manhood's strength while in the path of duty, loyal to friend and to truth, shrinking from no toil and from no unpleasant task, we recognize and are stirred by the inspection of his radiant example, the line of our duty is clearly revealed to us, to do each his work well, leaving all results to the Infinite Wisdom and Mercy that rules the destinies of men.

Resolved, That we tender to the now lonely wife, his helpmate in the home, his co-helper in the schools, our sincerest sympathy.

Resolved, That however much we may feel this death, her loss far transcends our own.

P. M. FISHER.
IRA G. HOITT.
CHARLES MURPHY.
MISS C. VIVIAN.
MISS A. MURPHY.

Appropriate remarks were made by Messrs. Hoitt, Fisher, and Murphy, the latter gentleman giving a biographical sketch of the deceased, his early struggle to obtain an education, his sterling virtues, and his remarkable success.

The resolutions were adopted by a rising vote, and the Association subsequently voted to send a copy to the family of the deceased.

The Committee on President's Address reported as follows:

Resolved, That we appreciate the sentiments expressed in the address of President More, and approve the suggestions made therein.

Resolved, That we recommend that the address be published in full in the Pacific Educational Journal.

J. B. McCHESNEY.
T. E. KENNEDY.
J. N. PEMBERTON.

The report was unanimously adopted.

James T. Hamilton, Treasurer, of San Francisco, read his report, showing that the Association began Tuesday with a deficit of \$20, and closed with a balance on hand of \$250.

Fifty dollars were voted to Miss Mary E. Morrison for her inestimable services as Secretary of the Association.

A pleasant episode of the exercises was the presentation of a beautiful

floral tribute by the teachers of Los Angeles County to the teachers of San Diego County.

The President-elect, James G. Kennedy, of the Cogswell Polytechnic Institute, San Francisco, was then installed by retiring President More, who presented him with the gavel (manufactured from orange wood grown upon the grounds of the State Normal School in Los Angeles, combined with olive wood, signifying harmony between the two citrus-bearing districts of the State). After an expression of full confidence in the new presiding officer, and after a very appropriate response from that gentleman, Mr. More left the affairs of the Association in his hands. The other officers-elect were duly installed.

After singing "Auld Lang Syne," the Association adjourned.

An interesting feature of this meeting of the Association was the exhibit of the Cogswell Polytechnic Institute of San Francisco. It embraced work by the pupils in both wood and iron. There were specimens of wood carving, lathe work, dove-tailing, etc., which gave evidence that the pupils were under good training. The school also exhibited a fine lot of drawings in plan and elevation, as well as in plain and isometric perspective.

San Diego County also had on exhibition at the Hollenbeck Hotel, specimens of drawing and other school work, which reflected credit on both teachers and pupils.

Superintendent Hoitt read a communication from George H. Bonebrake, in which he offered prizes to the students of the grammar and high schools of this county, as follows: To the pupil writing the best history of Los Angeles County, \$50; second best, \$30; third, \$20; the award to be made at the State Association at San Diego in December next.

Messrs. Babcock, Pierce, Wilson, Raymond, and Drake were appointed a committee to secure the publication of the proceedings of the Association, whenever it can be done without expense to the Association.

RESOLUTIONS.

The following resolutions were adopted:

Resolved, That it is the sense of this Association that instead of a National Bureau of Education, in charge of a Commissioner, there should be established by Congress the Department of Public Instruction, presided over by a Secretary, who shall be a member of the President's Cabinet, to the end that we may ultimately have a national system of education.

Resolved, That we heartily approve the work heretofore done by the State Reading Circle, and that its objects have our cordial commendation.

Resolved, That no paper shall hereafter be read before this Association except by its author.

Resolved, That we hereby tender our thanks to President J. G. Kennedy for his very interesting and instructive exhibit of the manual work of the Cogswell Polytechnic College of San Francisco; regret that he did not include needlework produced in his school.

Resolved, That we also express thanks for the excellent exhibit of kindergarten and other work presented by the teachers of San Diego and Pasadena.

Resolved, That while compelled to decline the invitation so kindly extended by the city of Stockton to hold the next annual meeting of the Association there, we return to her citizens our heartiest thanks for their generous proposals, which we hope may be repeated and accepted.

Resolved, That our thanks are due to Hon. Ira G. Hoitt, State Superintendent of Public Instruction, for the sympathetic interest he has taken in the work of the schools, and for the fidelity, energy, and efficiency with which he has labored in their interests.

Resolved, That our thanks are especially due to County Superintendent W. W. Seaman, City Superintendent W. F. Friesner, Mayor Hazard, Hon. S. M. White, and the people

of Los Angeles for the cordial and brilliant reception given to this Association upon the first evening of its session.

Resolved, That our thanks are due to the local committee for the admirable provision made for the accommodation of our meetings.

Resolved, That we cordially thank the officers of the Association for their excellent program, and especially President Ira More, for his thoughtful and inspiring address and courteous administration of his office; and to the Secretary, Mary E. Morrison, for the untiring devotion to the onerous duties of her position.

Resolved, That in extending thanks to the press of Los Angeles we desire to emphasize our appreciation of their very full, careful, and accurate reports of the work of this Convention.

Resolved, That our thanks are due the railroad and steamboat lines, and to the hotels of this city, for their liberal reduction and courteous treatment.

Resolved, That we appreciate the action of the counties of Los Angeles and San Diego in merging their County Institutes into this session of the State Association.

Resolved, That the teachers of California owe and hereby tender their testimonials of indebtedness to the late J. R. Brierly, who was ever a friend of the public school, in the school-room, in the educational councils, and in the halls of the Legislature.

Resolved, That we hereby tender a tribute of tender memory to Miss Kate Kennedy, for twenty-five years a teacher in the schools of San Francisco, and always foremost, not only as an educator, but as a defender of the rights of teachers.

Resolved, That we are strongly in favor of the amendment offered by Senator Spooner of Wisconsin to the Blair Mendicancy Bill, distributing the surplus of \$77,000,000 according to the illiteracy of children of school age, rather than according to the general illiteracy.

Resolved, That a copy of the above resolution be forwarded to our members of Congress, to be given to the proper committees, as an indication of our position in this matter.

Resolved, That it is the duty of all teachers, by precept and example, to promote physical, moral, and mental culture, and that we approve the action of the last Legislature in providing for instruction in the effects of alcoholics and narcotics upon the human system.

Resolved, That the child should be fully instructed in the use of both hand and brain, to insure a complete success in the various pursuits, and we therefore heartily indorse the introduction of industrial work into our public schools, and that we hail with pleasure the establishment of such special schools as the Cogswell Polytechnic College and the Leland Stanford, Jr., University.

L I S T

OF

HOLDERS OF CALIFORNIA STATE DIPLOMAS.

LIST OF HOLDERS OF CALIFORNIA STATE DIPLOMAS, ENDING JUNE 30, 1890.

LIFE DIPLOMAS.

NAMES.	When Issued.
Abbott, Charles S.	May 28, 1879.
Abbott, Warren	September 1, 1877.
Abbott, Lillian S.	January 27, 1882.
Achey, Philip	July 13, 1882.
Ackleson, Susan	September 1, 1877.
Acton, William	May 4, 1888.
Adair, Joseph A.	September 20, 1889.
Adams, Sallie E.	March 17, 1890.
Adams, Clara A.	August 20, 1881.
Adams, O. M.	March 13, 1879.
Adams, Lucy F.	May 4, 1888.
Adamson, Edward F.	August 20, 1881.
Adamson, John M.	August 9, 1884.
Adamson, W. H.	December 26, 1879.
Adney, Robert J. C.	December 23, 1886.
Ahern, Mary A.	July 12, 1886.
Aiken, Miss A. E.	March 13, 1879.
Aitken, Mrs. Nellie	April 1, 1887.
Albee, Dan. P.	September 10, 1886.
Alden, Carrie E.	May 1, 1883.
Alderson, M. J.	July 23, 1878.
Alderson, Annie	November 10, 1888.
Aldrich, Abbie F.	April 22, 1876.
Allen, L. D.	November 25, 1869.
Allen, Louise D.	March 30, 1886.
Allen, James M.	December 26, 1879.
Allen, Charles H.	September 24, 1878.
Allen, R. H.	March 28, 1878.
Allen, Mrs. Mary E.	June 13, 1890.
Allison, Benjamin F.	September 20, 1889.
Alsop, J. P. C.	November 25, 1869.
Alvord, Julius B.	August 8, 1887.
Alward, Mrs. Hettie M.	March 17, 1890.
Ambrose, Warren B.	June 12, 1880.
Ames, Martha	December 4, 1875.
Ames, N. Stella	May 4, 1888.
Ames, Charles G.	November 25, 1869.
Amick, Daniel B.	September 29, 1879.
Angell, Mrs. Emma W.	July 13, 1882.
Anderson, Irene E.	April 1, 1882.
Anderson, Anna B.	September 11, 1877.
Anderson, Eva S.	February 9, 1884.
Anderson, Mrs. E. W.	May 28, 1879.
Anderson, Jennie M.	November 22, 1884.
Anderson, Mrs. C. A.	November 28, 1873.
Anderson, Sarah	July 29, 1885.
Anderson, Fidelia	July 12, 1886.
Anderson, J. W.	December 15, 1868.
Anderson, W. W.	May 5, 1877.
Andrews, Cyrus N.	December 16, 1882.
Andrews, Jennie E.	August 9, 1884.
Aniser, Emilie	November 10, 1888.
Anthony, Sallie M.	December 30, 1882.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Appley, Judson	September 20, 1889.
Aram, Mattie L.	December 23, 1886.
Armer, Alice A.	June 13, 1881.
Armstrong, Flora E.	March 28, 1878.
Armstrong, William M.	May 17, 1884.
Armstrong, Nellie	May 4, 1888.
Arnett, Jane	December 16, 1882.
Arrasmith, Vernon	July 13, 1882.
Ashe, Lillie	January 27, 1881.
Ashe, Margaret L.	May 17, 1884.
Ashley, Ella E.	September 29, 1879.
Asmus, Elise M.	November 10, 1888.
Atkins, Edward S.	June 13, 1881.
Atterbury, Fannie L.	July 29, 1885.
Atwood, Mrs. C. L.	November 20, 1867.
Atwood, Mrs. N. J.	May 5, 1877.
Atwood, Hollis H.	November 6, 1880.
Averill, Anna S.	December 26, 1879.
Augustine, S. M.	June 23, 1878.
Augustine, Martha	May 4, 1888.
Aull, Mary F.	May 4, 1888.
Aull, Laura	March 17, 1890.
Austin, Annie	September 20, 1889.
Austin, Ella M.	September 10, 1886.
Ayer, Isaac	December 26, 1879.
Ayer, Hattie G.	March 30, 1886.
Ayers, Amos M.	June 12, 1880.
Ayers, Mrs. Mary J.	December 26, 1879.
Ayers, Lide G.	August 20, 1881.
Babcock, H. C.	July 23, 1878.
Babcock, Madison	December 31, 1887.
Babcock, Lyman W.	November 10, 1888.
Babcock, W. S.	January 29, 1876.
Bacon, Elizabeth M.	July 12, 1886.
Badger, Mrs. S. A.	December 26, 1879.
Bagley, Mary C.	December 30, 1882.
Bagnall, John	November 29, 1867.
Bailey, C. P.	December 15, 1868.
Bailey, A. A.	December 26, 1879.
Bainbridge, Augusta C.	January 27, 1881.
Baker, Fannie E.	January 27, 1881.
Baker, James F.	December 31, 1887.
Baker, Marcus P.	August 9, 1884.
Baker, S. D.	December 26, 1879.
Baker, William H.	August 9, 1884.
Baldwin, Hugh J. (duplicate)	December 9, 1884.
Baldwin, Miss Nettie	January 5, 1875.
Baldwin, Frank D.	April 1, 1882.
Bangs, Vital E.	October 26, 1877.
Banks, George	December 26, 1879.
Banks, H. J.	December 26, 1879.
Bannan, Margaret	November 22, 1884.
Barbour, A. C.	March 28, 1878.
Barbour, Tena	December 30, 1882.
Barham, Hattie L.	April 1, 1882.
Barker, Orie	September 24, 1878.
Barkly, J. G.	March 13, 1879.
Barkley, Minnie A.	August 9, 1884.
Barlow, Carrie B.	June 13, 1881.
Barnes, Eliza B.	March 28, 1878.
Barnum, Wm. Vance	March 17, 1890.
Barr, Miss Sarah A.	November 28, 1873.
Barrows, Laura M.	July 13, 1882.
Barry, Charlotte M.	October 26, 1877.
Bartholomew, Ella M.	May 17, 1884.
Bartholomew, Rachel	July 16, 1883.
Bassett, Jennie A.	May 5, 1877.
Bassham, Minnie C.	November 10, 1888.
Batchelder, H. T.	November 28, 1873.
Bateman, David T.	July 16, 1883.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Bateman, Henry	April 1, 1887.
Bateman, J. M. K.	May 28, 1879.
Baumgardner, Mrs. E. M.	April 22, 1876.
Baxter, Josie A.	December 23, 1886.
Bayley, Cora N.	June 14, 1889.
Beach, Sarah S.	December 26, 1879.
Beal, C. R.	March 13, 1879.
Beale, Frances E.	March 17, 1890.
Beales, Mrs. C. R.	June 3, 1872.
Beammer, Emma	September 1, 1877.
Beane, Emma H.	July 13, 1880.
Beaty, James G.	September 20, 1889.
Beauchamp, Delia	December 13, 1889.
Beck, Mrs. N. S.	December 26, 1879.
Beckett, J. F.	December 26, 1879.
Beebe, Sarah M.	March 13, 1879.
Belcher, Mary L.	August 9, 1884.
Bell, James E.	August 20, 1881.
Bell, Mrs. J. L.	December 26, 1879.
Benedict, Lottie E.	November 10, 1888.
Benjamin, Miss C. V.	June 3, 1872.
Berry, James H.	December 30, 1882.
Betancue, Miss L. C.	March 13, 1879.
Bendle, Kate	February 9, 1884.
Bengaugh, Eliza	March 13, 1879.
Bennett, Glora T.	March 13, 1879.
Bennett, Miss Mary E.	May 28, 1879.
Bennett, Miss Mary H.	June 22, 1872.
Bennett, Fannie E.	July 6, 1869.
Beninson, Lizzie R.	December 26, 1879.
Benson, Frantz S.	June 13, 1890.
Benson, Henry	November 10, 1888.
Bentley, Lettie E.	March 28, 1877.
Bernard, Miss A. S.	January 5, 1875.
Bernard, Lizzie M.	November 10, 1888.
Berry, J. E.	March 13, 1879.
Benn, Rachel R.	September 29, 1879.
Berger, Dollie W.	June 14, 1889.
Berger, Robert	July 29, 1885.
Betts, Ella J.	May 17, 1884.
Bevan, Julia C.	July 12, 1886.
Bevan, John T.	September 20, 1889.
Bevington, Lizzie	December 26, 1879.
Bigelow, Clara J.	March 24, 1885.
Bigelow, Susan H.	September 10, 1886.
Biggs, Mary L.	July 13, 1882.
Bills, Charles A.	November 6, 1880.
Bills, Miss R. A.	May 28, 1879.
Bingaman, William H.	January 27, 1882.
Bird, Mary	December 16, 1882.
Bird, William R.	July 16, 1883.
Bishop, Charles E.	June 13, 1881.
Bishop, Cynthia M.	June 13, 1881.
Bivens, Mrs. Emily	December 26, 1879.
Bixby, Maggie	August 8, 1887.
Black, Samuel T.	December 13, 1872.
Blackman, J. D.	September 29, 1879.
Blackmar, Frank W.	August 8, 1887.
Blackstaff, Marguerite	April 1, 1887.
Blackwood, Mrs. P. J.	September 24, 1878.
Blaisdell, Sabine W.	January 27, 1882.
Blaizeley, Mary E.	March 28, 1878.
Blake, Charles M.	June 24, 1874.
Blake, Miss Mary L.	December 26, 1879.
Blake, Catherine F. C.	June 13, 1890.
Blakely, James O.	October 26, 1877.
Blanchard, J. E.	July 23, 1878.
Bledsoe, Sallie A.	August 8, 1887.
Bloch, Bertha B.	May 4, 1888.
Bloomer, A. C.	January 29, 1876.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Blumb, Amelia C.	March 17, 1890.
Blythe, Kate	January 27, 1881.
Boardman, O. F.	September 29, 1879.
Bodkin, John J.	July 23, 1878.
Bodwell, Etta M.	July 12, 1886.
Bodwell, Miss Mary L.	December 27, 1866.
Boggs, Mary F.	July 29, 1885.
Boland, Joanna M.	January 2, 1886.
Boniface, Miss Sarah	September 29, 1879.
Bond, Eliza	February 9, 1884.
Bond, Seth H.	August 20, 1881.
Bonnard, Maramne	January 27, 1882.
Bonnard, Anna Eureka	December 26, 1879.
Bonnell, Kate	December 23, 1886.
Bonnelli, Edith M.	August 8, 1887.
Boone, Stanley C.	June 13, 1881.
Booth, Ella N.	May 4, 1888.
Booth, Libbie	July 29, 1885.
Boor, Elijah	January 27, 1881.
Boorse, Lizzie A.	June 13, 1890.
Boring, Ora	November 22, 1884.
Boschen, Adelaide	February 3, 1887.
Boschen, Seraphine	March 13, 1879.
Bostwick, Burton L.	December 16, 1882.
Bowman, Gordon	September 20, 1889.
Bowman, Levi	November 22, 1884.
Boyle, Miss Mary	December 26, 1879.
Boyle, Sarah J.	November 6, 1880.
Boynton, J. C.	September 24, 1878.
Boynton, Kate H.	March 28, 1878.
Boynton, S. S.	September 1, 1877.
Brackett, Ella L.	November 11, 1876.
Bradbury, Marcia G.	May 4, 1888.
Bradbury, Vesta E.	December 16, 1882.
Braddock, David W.	March 13, 1879.
Bradley, Mary E.	November 10, 1888.
Bradley, Mrs. C. P.	October 26, 1877.
Bradley, Cornelius B.	January 27, 1882.
Bradner, Mrs. Clara H.	September 19, 1882.
Bradner, Ernest H.	July 13, 1882.
Bradner, Mattie F.	September 19, 1882.
Bradshaw, Hallie L.	June 13, 1882.
Brady, Thomas	March 24, 1885.
Bragg, Elizabeth	December 23, 1886.
Bragg, Mary J.	December 4, 1875.
Braly, John H.	November 25, 1860.
Bramlet, R. H.	December 26, 1879.
Branch, Mary M.	December 30, 1882.
Bray, W. F.	September 29, 1879.
Brechenfeld, Meta C.	March 17, 1890.
Breck, Mary E.	December 30, 1882.
Brett, Mabel	June 14, 1888.
Brigham, Julia	September 1, 1877.
Brierly, John R.	January 29, 1876.
Brincard, Mrs. Kate A.	September 20, 1889.
Brink, Eulalia	November 10, 1888.
Bristow, Samuel E.	December 16, 1882.
Brite, Sabra S.	December 16, 1882.
Britton, S. W.	December 26, 1879.
Brock, David T.	May 4, 1888.
Brock, M. Ella	August 8, 1887.
Brock, George A.	July 29, 1885.
Brock, Elizabeth E.	June 14, 1889.
Brodtt, A. W.	March 14, 1871.
Brogan, Kate E.	June 4, 1887.
Brooke, Henry C.	May 28, 1879.
Brooks, E. R.	September 24, 1878.
Brooks, Elisha	September 24, 1878.
Brooks, James M.	July 12, 1886.
Brophy, M. C.	May 5, 1877.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Brothers, George A.	November 3, 1883.
Brower, Mrs. D. C.	December 26, 1879.
Brown, A. G.	May 5, 1877.
Brown, B. L.	March 28, 1878.
Brown, F. R.	July 5, 1867.
Brown, George	December 27, 1866.
Brown, G. J.	November 11, 1876.
Brown, James B.	November 11, 1876.
Brown, Frances A.	March 17, 1890.
Brown, John S.	July 29, 1885.
Brown, Julia B.	May 5, 1877.
Brown, Mary I.	November 10, 1888.
Brown, Le Roy	September 10, 1886.
Brown, L. L.	September 24, 1878.
Brown, N. H.	September 29, 1879.
Brown, Alcinous A.	May 17, 1884.
Brown, Mary J.	December 30, 1882.
Brown, Sarah A.	May 1, 1883.
Brown, Miss S. L.	June 22, 1874.
Brown, Chas. L.	February 3, 1887.
Browne, Annie M.	June 13, 1881.
Browne, Lizzie E.	December 31, 1887.
Bruch, Louis	February 9, 1884.
Brumley, Miss M. J.	July 23, 1878.
Bryant, Frank W.	March 17, 1890.
Buchholtz, Maria Von	November 3, 1883.
Buckalew, Mary F.	December 31, 1887.
Buckelew, Minnie E.	June 13, 1890.
Buckley, Emma S.	January 2, 1886.
Buckley, Anson E.	September 20, 1889.
Buckman, Miss C. T.	September 24, 1878.
Buckman, F. S. S.	June 1, 1875.
Bugbey, Mrs. B. N.	January 29, 1876.
Bugbey, Julia F.	December 16, 1882.
Bullfinch, S. A.	September 29, 1879.
Bull, Mary D.	March 28, 1878.
Bund, Johanna G.	December 23, 1886.
Bunker, Carrie R.	May 4, 1888.
Bunnell, George W.	December 27, 1866.
Bunner, Elizabeth	May 17, 1884.
Burbank, Emma L.	December 23, 1886.
Burge, Mrs. Jennie	December 26, 1879.
Burgess, J. Newton	August 20, 1881.
Burke, Jennie	May 28, 1879.
Burke, Lizzie K.	November 28, 1873.
Burnett, Albert G.	August 9, 1884.
Burnett, Harvey D.	July 29, 1885.
Burnett, John H.	May 17, 1884.
Burnett, Annie D.	September 20, 1889.
Burrill, Elvyn F.	January 2, 1886.
Burns, Archie H.	January 2, 1886.
Burston, Selina	September 20, 1889.
Burt, Eva S.	August 9, 1884.
Burt, Mary C.	December 23, 1886.
Burt, Sallie B.	January 27, 1881.
Burton, Jennie H.	July 29, 1885.
Bush, Mrs. E. A.	September 29, 1870.
Bush, Jennie R.	March 24, 1885.
Bushwell, Emma F.	November 10, 1888.
Butcher, William T.	December 23, 1886.
Butler, A. D.	January 27, 1881.
Butler, Orpha	November 3, 1883.
Butler, R. D.	May 28, 1879.
Butterfield, Sampson H.	April 1, 1882.
Buzzo, Mrs. Metta G.	January 27, 1881.
Byrod, Sarah J.	May 5, 1877.
Byrne, H. J.	December 26, 1879.
Cadwell, Louisa F.	December 23, 1886.
Cadwell, Mrs. M. E.	March 28, 1878.
Cadwell, Susie J.	February 9, 1884.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Caldwell, Charles J.	March 17, 1890.
Caldwell, Ida E.	July 29, 1885.
Calhoun, Robert S.	December 23, 1886.
Call, Mattie C.	November 11, 1876.
Callahan, Mary E.	November 22, 1884.
Callsen, Helena	January 23, 1885.
Camblien, Mrs. Mary T.	September 20, 1889.
Campbell, Mrs. Isabel	December 13, 1889.
Campbell, Annie B.	April 8, 1889.
Campbell, Miss Amelia	May 28, 1879.
Campbell, Miss A. T.	November 11, 1876.
Campbell, C. E.	December 13, 1877.
Campbell, F. M.	November 28, 1873.
Campbell, Mrs. Kate A.	December 26, 1879.
Campbell, Ruth G.	January 27, 1882.
Candee, Kate H.	December 31, 1887.
Canham, Mary J.	December 16, 1882.
Cappelman, Cornelia J. C.	April 8, 1889.
Carithers, Eli	January 27, 1882.
Carlin, William H.	September 20, 1889.
Carlisle, Mrs. E. M.	March 13, 1879.
Carlton, H. P.	June 8, 1866.
Carmichael, P. J.	March 28, 1878.
Carpenter, Miss A. O.	March 28, 1878.
Carr, Mrs. E. S.	December 26, 1879.
Carr, Frank S.	December 31, 1887.
Carr, Ezra S.	May 5, 1877.
Carr, Francis	March 28, 1878.
Carr, J. E.	September 28, 1879.
Carr, Mary A.	December 16, 1882.
Carrington, Addie C.	July 29, 1885.
Carrington, Maria	July 29, 1885.
Carroll, Laura	December 23, 1886.
Carson, Mary E.	February 9, 1884.
Carter, Elmer J.	December 16, 1882.
Carter, Lucy A.	July 29, 1885.
Carter, Rebecca T.	July 16, 1883.
Carusi, Samuel P.	December 26, 1879.
Carville, Henrietta E.	December 13, 1889.
Casey, Kate F.	December 23, 1886.
Casey, Mary E.	July 29, 1885.
Casseras, Mrs. Julia W.	December 26, 1879.
Castelbun, Miss Maria A.	June 22, 1874.
Casterlin, J. B.	July 23, 1878.
Casterlin, Mrs. M. A.	July 23, 1878.
Case, E. L.	March 13, 1879.
Cate, H. W.	March 13, 1879.
Catlin, Amelia G.	January 27, 1882.
Chadwick, A. M.	September 24, 1878.
Chalmers, Annie B.	January 5, 1875.
Chalmers, Christine	November 3, 1883.
Chamberlain, Annie E.	March 13, 1879.
Chamberlain, Mattie L.	July 12, 1886.
Chandler, Miss Ella	June 12, 1880.
Chandler, Joseph F.	January 27, 1882.
Chapin, F. W.	May 28, 1879.
Chapman, M. V.	June 3, 1872.
Chapman, Hervey W.	November 10, 1888.
Chapman, Mary L.	June 4, 1887.
Chase, Ella	November 3, 1883.
Chase, Willis S.	May 4, 1888.
Cheal, James	May 4, 1888.
Cheney, Lydia M.	December 16, 1882.
Chesbro, Mary C.	June 13, 1881.
Chestnut, J. G. (duplicate)	February 9, 1884.
Chestnutwood, John A.	February 17, 1873.
Chestnutwood, Mrs. J. A.	December 4, 1875.
Childs, C. W.	May 27, 1868.
Childs, Kate B.	September 24, 1878.
Childs, Lucy E.	July 16, 1883.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Childress, Clay C.	December 13, 1889.
Chisholm, Ida M.	July 12, 1886.
Chitwood, Mary E.	July 16, 1883.
Chipman, L. J.	May 5, 1877.
Choate, Susie J.	December 26, 1879.
Church, William S.	June 13, 1881.
Churchill, Clara I.	December 23, 1886.
Ciprico, Miss Anita	May 5, 1877.
Ciprico, Eleanor L.	November 10, 1888.
Clapp, Alma C.	May 4, 1888.
Clapp, Mrs. L. K.	December 15, 1868.
Clark, Dorcas	November 29, 1867.
Clark, Ella E.	May 17, 1884.
Clark, Charlotte K.	April 8, 1889.
Clark, Mrs. H. M.	December 27, 1866.
Clark, L. R.	July 12, 1870.
Clark, Jacob S.	July 29, 1885.
Clark, Mary E.	November 29, 1867.
Clark, Mrs. Della	January 27, 1882.
Clark, Mrs. Mac A.	August 20, 1881.
Clark, M. C.	June 1, 1875.
Clark, David C.	September 30, 1885.
Clark, Mrs. S. A.	May 28, 1879.
Clark, W. J.	October 26, 1877.
Clark, Alonzo N.	December 26, 1879.
Clark, S. V. S.	December 26, 1879.
Clason, Rollo S.	August 20, 1881.
Classen, Louise M.	January 2, 1886.
Clawson, Mrs. A. W.	December 26, 1879.
Clay, Wm. T.	December 26, 1879.
Clayton, Lizzie A.	August 9, 1884.
Clelland, James McG.	December 16, 1882.
Clement, Charles H.	March 28, 1878.
Clement, Geraldine P.	March 17, 1890.
Cleveland, Miss E. A.	June 3, 1873.
Clindinin, Clara A.	January 27, 1882.
Clow, Amelia B.	March 30, 1886.
Clyborne, Jennie V.	May 17, 1884.
Clyborne, W. Frank	May 1, 1883.
Coates, John	December 31, 1887.
Coates, Rosa E.	April 8, 1889.
Coburn, Louis F.	February 9, 1884.
Code, Mrs. E. S.	September 29, 1879.
Coe, Eli G.	March 4, 1871.
Coffey, Alex. B.	December 31, 1887.
Coffman, N. B.	January 27, 1881.
Cohen, Alice H.	April 8, 1889.
Cohen, Minnie	April 8, 1889.
Cohen, Carrie	December 10, 1884.
Colby, Phoebe S.	February 9, 1884.
Colby, Mrs. M. A. (now Mrs. M. A. Ramsdell)	September 29, 1879.
Colby, Martha A.	November 10, 1888.
Colby, Miss Julia E.	December 26, 1879.
Cole, Belle	May 17, 1884.
Cole, Celia A.	November 6, 1880.
Cole, Mrs. Frances	March 28, 1878.
Cole, Mrs. Emma F.	June 13, 1881.
Cole, Jennella P.	July 16, 1883.
Cole, Maria D.	March 24, 1885.
Cole, Mattie A.	December 13, 1889.
Coleman, Mrs. D. M.	October 26, 1877.
Coleman, Fannie E.	November 10, 1888.
Coleman, Jennie	May 17, 1884.
Coles, Ida E.	July 29, 1885.
Collier, Mrs. J. W.	September 1, 1877.
Collins, Christine R.	September 17, 1881.
Collins, James D.	August 20, 1881.
Collins, Mary E.	December 16, 1882.
Congdon, Anna R. (now Mrs. Anna Wood)	June 13, 1881.
Conger, Kate E.	July 12, 1886.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Conklin, E. B.	March 4, 1871.
Conklin, Kate	November 10, 1888.
Conlan, Agnes G. W.	July 13, 1882.
Connell, Mary I.	January 2, 1886.
Connolly, Mrs. Josephine J.	September 17, 1881.
Connors, Mary E.	January 27, 1882.
Connolly, John J.	September 24, 1878.
Conover, Flora.	July 29, 1885.
Conrad, Francis W.	April 8, 1889.
Converse, Charles H.	December 16, 1882.
Cook, Nellie.	December 27, 1888.
Cook, Miss Hannah.	November 28, 1873.
Cook, Henry F.	August 9, 1884.
Cook, William H.	November 3, 1883.
Cook, Mrs. P.	March 29, 1870.
Cook, W. F.	November 6, 1880.
Cooley, Kate	July 29, 1885.
Cooney, Ellen C.	July 12, 1886.
Cooper, Miss Mary	June 12, 1880.
Cooper, Susie V.	December 26, 1879.
Cooper, Mrs. Minnie Sabin.	March 17, 1890.
Cooper, C. A.	March 13, 1879.
Cooper, Mrs. Frances A.	March 28, 1878.
Cooper, Belle S.	July 13, 1882.
Cooper, Mrs. Jennie D.	January 27, 1882.
Copeland, Justin M.	July 13, 1882.
Corinne, R. E.	January 27, 1881.
Corkerey, Miss Mary	December 26, 1879.
Cornelius, L. E.	March 28, 1878.
Cornell, Samuel	November 22, 1884.
Cornell, Ella L.	September 30, 1885.
Cornman, Josephine A.	August 9, 1884.
Cory, Amelia A.	September 24, 1878.
Cottle, Melville	May 21, 1869.
Coult, Ella	July 29, 1885.
Coulter, Adolphus H.	September 30, 1885.
Courter, H. F.	December 26, 1879.
Cowdrey, William A.	March 13, 1879.
Cox, Kate M.	September 1, 1877.
Cox, Mary M.	December 16, 1882.
Costelloe, Peter	January 27, 1882.
Covington, Mrs. Laura M.	January 27, 1882.
Crabb, Arza	January 27, 1882.
Craig, Annie	November 22, 1884.
Crane, Amanda	April 22, 1876.
Crane, Charles B.	April 1, 1887.
Crane, Ellis T.	September 29, 1879.
Crane, George	March 28, 1878.
Crane, Willimena Wessel	April 1, 1887.
Cranze, Sophia.	March 28, 1878.
Craven, Andrew F.	June 22, 1874.
Craven, Nettie R.	March 13, 1879.
Craven, John J.	March 17, 1890.
Crawford, Isaac S.	April 8, 1889.
Crawford, Alonzo	May 28, 1879.
Crawford, Mrs. J. T.	June 22, 1874.
Crawford, Milton T.	July 12, 1886.
Crawford, T. O.	December 4, 1875.
Crawford, Lucy E.	August 9, 1884.
Creighton, S. G.	December 26, 1879.
Crenshaw, Susie	June 13, 1881.
Cressey, E. M.	October 26, 1877.
Cressey, W. E.	March 28, 1878.
Crichton, Mrs. A. M.	September 29, 1879.
Crittenden, Mrs. D. H.	December 26, 1879.
Crittenden, Joseph L.	May 17, 1884.
Crittenden, Mary L.	September 20, 1889.
Crocker, Mrs. Mary J. C.	January 27, 1882.
Crofton, Kittie	January 27, 1882.
Cromwell, Belle S.	November 10, 1888.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Cromwell, Frank A.	November 10, 1888.
Cromwell, Clarence H.	January 23, 1885.
Cromwell, James G.	December 26, 1879.
Cronkite, Earl B.	November 10, 1888.
Cronmiller, Mary M.	April 8, 1889.
Crook, W. C.	March 13, 1879.
Cross, Benjamin F.	December 23, 1886.
Cross, C. W.	January 5, 1875.
Crossley, Francis M.	July 13, 1882.
Crossett, F. M.	January 29, 1876.
Crouch, Melissa G.	August 8, 1887.
Crough, Daniel	July 16, 1883.
Crowell, C. H.	February 17, 1873.
Crowley, Mary E.	November 10, 1888.
Cronyn, Zella	November 22, 1884.
Crowhurst, William	June 1, 1875.
Cruikshank, Samuel A.	December 27, 1888.
Crumrine, Harrison	July 23, 1882.
Cullen, Fannie	August 8, 1887.
Cummings, C. C.	December 27, 1866.
Cummings, David B.	June 4, 1887.
Cummings, E. C.	March 28, 1878.
Cunningham, Francis	July 16, 1883.
Currier, Mrs. M. H.	December 26, 1879.
Curry, Margaret E.	November 10, 1888.
Curryer, John S.	June 4, 1887.
Cushman, Nellie B.	June 4, 1887.
Curtis, Emma A.	July 16, 1883.
Curtis, Henry C. (duplicate)	November 22, 1884.
Curtis, Jennie	July 12, 1886.
Curtis, Louis F.	September 29, 1879.
Curtis, Laura A. B.	December 26, 1879.
Curtis, Mary W.	March 24, 1885.
Curtis, Delia	September 20, 1889.
Cutler, John E.	January 2, 1886.
Cutter, James W.	April 1, 1887.
Dascomb, Charles E. H.	December 23, 1886.
Dakin, William J.	May 17, 1884.
Daman, Aurelius O.	June 13, 1881.
Daniels, Mrs. S. B.	September 24, 1878.
Darke, F. E.	September 24, 1878.
Darby, R. R.	July 23, 1878.
Darling, Frank H.	August 9, 1884.
Darling, Kate V.	December 30, 1882.
D'Arcy, Alice M.	July 13, 1882.
D'Arcy, Miss M. E.	December 13, 1872.
Dashields, Fred. S.	March 13, 1879.
David, Mrs. Alice	October 26, 1877.
Davidson, Nannie	March 13, 1879.
Davidson, R. P.	October 26, 1877.
Davidson, William W.	July 16, 1883.
Davis, Nathaniel W.	January 27, 1881.
Davis, Richard L.	July 13, 1882.
Davis, E. W.	March 13, 1879.
Davis, Natalia H.	November 10, 1888.
Davis, Horace M.	January 23, 1885.
Davis, Imogene W.	January 5, 1875.
Davis, J. T.	April 22, 1876.
Davis, A. W. G.	November 6, 1880.
Davis, Helen W.	September 20, 1889.
Day, Alfred H.	March 30, 1886.
Day, Eulalia A.	April 1, 1887.
Day, F. H.	March 13, 1879.
Dean, W. F.	July 13, 1880.
Deane, Mamie	July 16, 1883.
Deane, Mrs. M.	June 13, 1871.
Dearborn, Lydia W.	August 8, 1887.
Deetkin, Mrs. Lizzie G.	June 22, 1874.
De Brish, Louis	September 20, 1889.
De Lancie, Richard	June 13, 1881.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Delay, D. J.	May 28, 1879.
De Mandran, F. V. C.	July 23, 1878.
Demick, Ruth M.	September 29, 1879.
Denman, James	December 27, 1866.
Dennis, L. M.	January 27, 1881.
Denton, Flora	May 17, 1884.
De Nure, D. D.	May 28, 1879.
De Pencier, S. F.	July 23, 1878.
Deuel, Mrs. Harriet	May 28, 1879.
Deuel, Nancy H.	June 13, 1881.
Dickenson, Maria T.	September 24, 1878.
Dickerson, Helen R.	January 2, 1886.
Dickinson, Everet C.	July 29, 1885.
Dickson, Bessie	March 13, 1879.
Dickson, Jennie	August 8, 1887.
Dickson, Regina M.	September 29, 1879.
Dickson, James M.	January 27, 1882.
Dickson, Eliza	December 13, 1889.
Dickson, William O.	September 20, 1889.
Dillingham, William K.	December 13, 1889.
Dinning, Thomas H.	December 23, 1886.
Dingle, Charles E.	August 9, 1884.
Dixon, Mattie	February 3, 1887.
Dixon, Alfred	January 27, 1882.
Dodson, Alice M.	September 20, 1889.
Doheney, Louise J.	June 13, 1890.
Donahue, Lizzie E.	December 23, 1886.
Donnelly, Louise	April 1, 1887.
Donnelly, Mary E.	December 30, 1882.
Dooner, John	January 5, 1875.
Doom, Fannie.	January 27, 1882.
Doran, Julia A.	July 13, 1882.
Dore, Anna M.	September 19, 1882.
Dorsey, Lou	July 16, 1884.
Doty, James M.	May 29, 1879.
Dowe, Marshall C.	April 1, 1887.
Dowling, Jennie E.	December 26, 1879.
Downs, Alfred	May 4, 1888.
Downing, Levi P.	April 1, 1882.
Doyle, Irene M.	January 27, 1882.
Doyle, James M.	December 26, 1879.
Doyle, Lizzie E.	May 4, 1888.
Dozier, Melville	March 28, 1878.
Drake, A. J.	March 14, 1871.
Drake, Charles M.	January 29, 1876.
Drew, Alexander M.	July 12, 1886.
Drew, Mrs. Maggie	January 27, 1881.
Driscoll, Kate	July 13, 1890.
Duane, Mrs. A. S.	June 3, 1872.
Du Bois, C. G.	July 23, 1878.
Du Bois, Mrs. A. E.	December 15, 1868.
Du Bois, J. B.	January 29, 1876.
Dudley, Alice J.	March 24, 1865.
Duenkle, William	December 4, 1875.
Duggan, Amelia A.	March 30, 1886.
Dunbar, Nannie S.	November 11, 1876.
Dunbar, S. G. S.	November 11, 1876.
Dunbar, Vilette J.	May 5, 1877.
Duncan, Belle	July 12, 1886.
Duncan, Belle	May 4, 1888.
Duncan, Nellie M.	July 12, 1886.
Duncan, Annie	May 5, 1877.
Duncan, Elizabeth	May 5, 1877.
Duncan, Luella	September 20, 1889.
Dunham, Malone	March 17, 1890.
Dunham, Florence A.	July 29, 1885.
Dunham, Maggie B.	January 2, 1886.
Dunn, Harriet E. (duplicate).	September 20, 1889.
Dunn, Robert H.	September 20, 1889.
Dunn, Hetty A.	June 14, 1889.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Dunsmoor, John M.	December 30, 1882.
Durham, C. F.	December 26, 1879.
Dunlap, Augusta J.	December 16, 1882.
Duraind, May	December 16, 1882.
Durgin, Hattie E.	June 13, 1890.
Dwyer, Jennie A.	May 4, 1888.
Dye, Adoniram J.	July 29, 1885.
Dyer, Barlow	December 26, 1879.
Earle, Clara B.	July 13, 1882.
Earle, Susie H.	December 16, 1882.
Eastin, A.	December 26, 1879.
Eastwood, William F.	March 24, 1885.
Ebersold, Emily E.	July 16, 1883.
Eddy, Andrew W.	November 10, 1888.
Eddy, David M.	January 27, 1882.
Eddy, J. M.	December 26, 1879.
Eddy, Mrs. M. J.	December 26, 1879.
Edmondson, Emma F.	April 8, 1880.
Edsinger, A.	December 26, 1879.
Edwards, Della R.	May 4, 1888.
Edwards, D. K.	December 26, 1879.
Edwards, W. H.	July 13, 1880.
Edwards, Clara D.	July 29, 1885.
Edwards, Alcea E.	July 13, 1882.
Edwards, Edith R.	August 20, 1881.
Edwards, Priscilla	June 13, 1881.
Efley, Agnes	November 10, 1888.
Eickhoff, J. Henry	November 28, 1873.
Elder, Elva R.	January 27, 1882.
Elkins, Clara Glenora	April 1, 1887.
Elliott, Erastus P.	December 31, 1887.
Elliott, John G.	February 9, 1884.
Elliott, Kate	September 29, 1879.
Elliott, Mary E.	July 23, 1878.
Elliott, Ella J.	April 1, 1882.
Elliott, Van R.	February 3, 1887.
Ellis, James W.	June 13, 1881.
Ellis, Carrie M.	November 14, 1876.
Ellis, Miss M. C.	September 1, 1877.
Ellsworth, Sarah J.	April 1, 1882.
Emerson, Frank W.	July 13, 1880.
Emigh, Annie	December 31, 1887.
Emmons, Idella C.	March 17, 1890.
Emory, Cordelia	July 23, 1878.
Engelbright, Minnie	April 8, 1889.
England, Basha	July 13, 1882.
English, Mrs. E. C. A.	December 26, 1879.
English, Rebecca F.	May 4, 1888.
Ennis, Charles L.	December 26, 1879.
Entrican, Mrs. D. O.	September 29, 1879.
Espey, Jennie	December 23, 1886.
Estes, Arthur B.	November 3, 1883.
Estill, Lavina	September 20, 1889.
Estrada, Fannie	September 10, 1886.
Evans, Adolphus M.	November 22, 1884.
Evans, William J.	July 29, 1885.
Evans, Josephine C.	November 3, 1883.
Evans, Cicero P.	September 20, 1889.
Everett, Rosa A.	September 20, 1889.
Everman, Barton W.	June 13, 1881.
Evinger, Frederic A.	August 9, 1884.
Fablinger, James	July 29, 1885.
Fagan, Mary J.	April 1, 1887.
Fahey, Maggie E.	July 13, 1882.
Fairchild, Miss H. M.	May 5, 1877.
Fairchild, Maria E.	December 27, 1888.
Fairchild, Asa M.	July 16, 1883.
Faith, C. E.	March 28, 1878.
Fallon, Kate	May 4, 1888.
Fallon, J. K.	September 1, 1877.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Farley, A. J.	December 13, 1872.
Farley, Rose E.	April 8, 1889.
Farnham, Moses P.	February 9, 1884.
Farrar, Joseph T.	July 16, 1883.
Farrell, Aggie.	December 16, 1882.
Farrington, Mrs. Sarah J.	January 27, 1882.
Fassett, B. A.	July 13, 1880.
Fassett, F. R.	December 26, 1879.
Faulkner, Richard D.	December 23, 1886.
Faulkner, Susie H.	July 12, 1886.
Fay, Mary A.	November 3, 1883.
Featherly, Miss H.	September 24, 1878.
Fellars, Lorenzo	May 5, 1877.
Felts, J. M.	September 1, 1877.
Fenton, Bertha A.	November 3, 1883.
Fenton, H. W.	May 5, 1877.
Ferguson, Sara S.	September 19, 1882.
Ferguson, E. Robina.	April 8, 1889.
Field, Sophia C.	February 3, 1887.
Fields, Miss Carrie P.	June 1, 1875.
Fike, James A.	December 16, 1882.
Finch, Augusta P.	December 4, 1875.
Finch, J. B.	November 1, 1871.
Finch, Sabra A.	September 30, 1885.
Finley, Samuel J.	March 30, 1886.
Finnegan, Edward	February 9, 1884.
Firehammer, Julius H.	July 13, 1882.
Fisk, Julia A.	January 29, 1876.
Fisher, Kate B.	March 28, 1878.
Fisher, Katie B.	February 3, 1887.
Fisher, Philip M.	August 9, 1884.
Fitts, Elizabeth S.	December 26, 1879.
Fitzgerald, May M.	November 10, 1888.
Fitzgerald, A. L.	November 11, 1871.
Flaherty, Belle	May 4, 1888.
Fleming, Kate	December 16, 1882.
Fitzsimmons, Kate	February 9, 1884.
Flint, Almira	November 11, 1876.
Floden, Karl A.	June 13, 1890.
Floyd, E. F.	March 13, 1879.
Floyd, May E.	March 13, 1879.
Floyd, Mrs. C. F.	June 12, 1880.
Folger, Sarah J.	May 5, 1877.
Forbes, Jennie A.	January 27, 1882.
Ford, F. W.	September 29, 1879.
Ford, James A.	May 28, 1879.
Ford, Ann L.	December 26, 1879.
Ford, Howard	March 17, 1890.
Fordemwalt, Ida	July 12, 1886.
Forseman, Dersie A.	January 27, 1882.
Forsythe, Jessie	March 24, 1885.
Fortson, Laura M.	July 16, 1883.
Foss, Benjamin R. (duplicate).	February 9, 1884.
Foss, William F.	May 28, 1879.
Footman, Henry E.	May 28, 1879.
Foster, Albert S.	August 8, 1887.
Foster, Mrs. Emily.	June 22, 1874.
Foster, Granville F.	August 8, 1887.
Foster, Mrs. J. A.	November 28, 1873.
Fowler, B. F.	November 11, 1877.
Fowler, Harrison	July 16, 1883.
Fowler, Laura T.	December 15, 1868.
Fowler, Douglas T.	December 26, 1879.
Fowler, Elizabeth N.	August 20, 1881.
Fowler, Mrs. Lizzie F.	March 17, 1890.
Frace, John	December 23, 1886.
Frambes, O. S.	June 12, 1880.
Frambes, Mrs. S. E.	June 12, 1880.
Franklin, Alice R.	July 29, 1885.
Franklin, Mary E.	December 23, 1886.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Frater, Abbie M.	September 10, 1886.
Frater, Jessie E.	January 2, 1886.
Frazer, Robert W.	June 14, 1888.
Frazier, Charles E.	July 16, 1883.
Freeman, G. N.	January 5, 1875.
Freeman, Mrs. Frances	December 13, 1889.
Freeman, Callie	April 8, 1889.
Freese, Andrew J.	June 4, 1887.
French, Miss Mary F.	May 28, 1879.
French, Nellie K.	May 17, 1884.
French, Miss Sarah T.	May 28, 1879.
Frick, George W.	November 10, 1888.
Frick, Margaret J.	June 4, 1887.
Frick, Luther M.	September 20, 1889.
Fries, Lucie	December 23, 1886.
Frontin, Elizabeth A.	May 4, 1888.
Fry, W. H.	December 13, 1872.
Fuller, A. L.	November 25, 1869.
Fuller, Eugenie	December 31, 1887.
Fuller, Flora M.	November 10, 1888.
Fuller, Mary E. C.	July 12, 1886.
Fuller, Kate M.	January 27, 1882.
Furber, Caroline	March 17, 1890.
Furlong, Robert	January 27, 1881.
Furlong, George	January 29, 1876.
Furman, Frederick M.	July 12, 1886.
Gage, Lewis C.	November 3, 1883.
Gage, Cora E. D.	November 22, 1884.
Gage, M. D.	March 28, 1878.
Gaddis, Mary	June 14, 1889.
Galbraith, William Henry	June 14, 1889.
Galbraith, Alma J.	June 14, 1888.
Gallagher, Gertrude	December 31, 1887.
Gallagher, Eunice	November 10, 1888.
Gallagher, Maggie J.	November 6, 1880.
Gallagher, Cora	December 27, 1888.
Gallagher, Lily E.	April 8, 1889.
Gallimore, Frances	May 4, 1888.
Galloway, Allen R.	September 20, 1889.
Galusha, N. H.	July 23, 1878.
Gamble, John	July 23, 1878.
Gamble, John A.	July 16, 1883.
Gamble, Lucy J.	December 23, 1886.
Garbutt, Mary E.	June 4, 1887.
Garland Abbie A.	November 22, 1884.
Garlick, Etha F.	May 4, 1888.
Garlick, J. P.	March 28, 1878.
Garrison, Spencer C.	June 13, 1890.
Garrison, Mrs. Martha E.	June 13, 1890.
Gardner, Maria E.	March 30, 1886.
Gardiner, Eunice D. (now Mrs. Marion)	February 9, 1884.
Gardner, Maggie	December 26, 1879.
Garton, Marietta	July 29, 1885.
Garwood, Mrs. S. E.	December 26, 1879.
Garwood, Benjamin V.	September 20, 1889.
Gates, Mrs. M. J. B.	December 26, 1879.
Gates, Mrs. S. B.	September 1, 1877.
Gates, Alice	July 29, 1885.
Garin, Paul A.	November 1, 1876.
Gavigan, Annie E.	December 31, 1887.
Gay, Adella D.	July 12, 1886.
Geary, May	January 2, 1886.
Garretson, Emma M.	July 12, 1886.
Germain, Carrie	March 28, 1878.
Gesford, H. C.	December 26, 1879.
Gesford, Laura J.	December 26, 1879.
Gibbons, Annie P.	December 26, 1879.
Gibbs, Edward	December 30, 1882.
Gibbs, Jennie L.	January 27, 1882.
Gibbs, Ellen	June 14, 1889.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Gibson, Fred. H.	December 16, 1882.
Gibson, Elizabeth J.	March 24, 1885.
Gibson, Lettie.	May 4, 1888.
Gibson, J. C.	September 1, 1877.
Gilbert, Hattie	July 12, 1886.
Gillespie, Evadner J.	April 1, 1882.
Gillespie, Luella	November 10, 1888.
Gilman, M. Jennie	January 27, 1882.
Gilman, Lucy A.	January 27, 1882.
Gilmer, Kate	December 13, 1889.
Givens, Lou	January 27, 1882.
Givens, Nellie M.	April 1, 1882.
Gleason, Mrs. Cora.	February 3, 1887.
Gleaves, James M.	January 27, 1881.
Glendenning, Hattie E.	June 14, 1888.
Glennon, Isabel	July 16, 1883.
Glidden, Cora A.	May 4, 1888.
Glidden, R. J.	March 28, 1878.
Glover, Arthur W. (duplicate)	March 30, 1886.
Godfrey, G. K.	December 26, 1879.
Gober, Lucy L.	July 12, 1886.
Goin, T. J.	July 23, 1878.
Goldman, Julia E.	March 17, 1890.
Goldsmith, Bertha	June 4, 1887.
Goldsmith, Esther	October 26, 1877.
Goldsmith, Rose	December 30, 1882.
Gooch, Emma A.	July 12, 1886.
Goodell, George	July 29, 1885.
Goodrich, A. H.	June 20, 1868.
Goodspeed, Hersalora C.	December 16, 1882.
Goodspeed, Stella L.	July 12, 1886.
Gorman, W. J.	February 17, 1873.
Gorman, Miss J. B.	September 29, 1879.
Gordan, Mrs. E. A.	March 13, 1879.
Gould, Jennie C.	January 27, 1882.
Gourley, Miss Jennie	September 1, 1877.
Govan, Jeannie W.	June 14, 1889.
Gower, Mary C.	December 30, 1882.
Graebe, Mattie J.	April 8, 1889.
Gracier, Addie J.	June 14, 1889.
Gracey, Robert.	September 29, 1872.
Graf, Miss Minnie	December 13, 1879.
Graham, Agnes	June 14, 1888.
Graham, Mollie V.	December 31, 1887.
Graham, Emma M.	May 17, 1884.
Granger, W. N.	May 2, 1868.
Grainger, Ira L.	December 30, 1882.
Grainger, W. C.	July 23, 1878.
Graney, Miss Maggie	May 28, 1879.
Grant, Miss Ellen G.	January 5, 1875.
Grant, Florence	April 8, 1889.
Grant, Emily W.	March 17, 1890.
Grant, Miss Helen A.	June 5, 1875.
Grant, Robert A.	July 16, 1883.
Grant, Mrs. Sue E.	August 20, 1881.
Graves, O. E.	May 28, 1879.
Gray, Miss A. L.	September 1, 1877.
Gray, Thomas B.	January 2, 1886.
Gray, John C.	May 21, 1869.
Greely, John P.	December 23, 1886.
Green, Mrs. Annette H.	January 27, 1882.
Green, Frank R.	February 3, 1887.
Greenman, Minnie J.	April 8, 1889.
Greeg, Alice C.	September 24, 1878.
Greer, Miss Jane E.	June 1, 1875.
Gregory, Calvin L.	September 30, 1885.
Gregory, Flaria M.	April 8, 1889.
Gretter, George W.	March 24, 1885.
Griffiths, Emma	May 17, 1884.
Griffith, Mrs. Aurelia	March 14, 1874.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Griffin, Lizzie M.	November 10, 1888.
Griffin, Charles R.	September 1, 1877.
Griffin, Lizzie	March 28, 1878.
Griffin, Martha E.	September 1, 1877.
Griffin, Rebecca E.	February 9, 1884.
Griffin, Fannie E.	April 8, 1889.
Grimm, Lucullus K.	March 17, 1890.
Grinnell, Emory E.	April 1, 1887.
Griswold, Milton B.	July 16, 1883.
Grove, Lillian L.	December 23, 1886.
Grove, Olin W.	December 31, 1887.
Groves, Gertrude.	April 8, 1889.
Grubbs, Elisha P.	December 30, 1882.
Grunsky, Lottie F.	April 1, 1882.
Guinn, James M.	November 11, 1871.
Guirey, Mrs. Mary E.	December 26, 1879.
Gulick, Charles Francis	September 30, 1885.
Gunn, Miss S. M.	June 1, 1875.
Gurney, Benjamin	July 23, 1878.
Guthrie, Finis W.	September 20, 1889.
Gwartney, John G.	November 10, 1888.
Hadley, James L.	December 31, 1887.
Hadsell, Sydney F.	July 13, 1882.
Hagen, Jane L.	January 27, 1881.
Hagen, Miss Louise C.	May 28, 1879.
Hager, Charles R.	September 29, 1879.
Hager, Hattie I. D.	July 12, 1886.
Hagerman, A. B.	December 26, 1879.
Hail, F. G.	December 26, 1879.
Haile, Lucy W.	November 10, 1888.
Haile, Cornelia	March 28, 1879.
Hails, Abby I.	September 20, 1889.
Haislip, B. F.	December 26, 1879.
Haislip, Charles C.	May 1, 1883.
Haley, Ella F. W.	November 10, 1888.
Haley, W. T.	September 1, 1877.
Hall, Miss Frances M.	April 22, 1876.
Hall, George C.	October 26, 1877.
Hall, Henry C.	December 31, 1887.
Hall, Maggie J.	March 28, 1878.
Hall, Miss Mary Ward	July 23, 1878.
Hall, Thomas A.	July 16, 1883.
Hall, Winfield S.	March 17, 1890.
Halloran, Joseph F.	June 13, 1881.
Ham, Charles H.	July 23, 1878.
Hambleton, Angelina	March 30, 1886.
Hamil, Mrs. Amelia H.	September 24, 1878.
Hamilton, Miss Addie	November 28, 1873.
Hamilton, John E.	March 25, 1885.
Hamilton, Hiram	March 13, 1879.
Hamilton, H. M.	March 13, 1879.
Hamilton, Maggie	June 13, 1881.
Hamilton, Margaret (duplicate)	July 12, 1886.
Hamilton, M. J.	September 29, 1879.
Hamilton, James T.	December 26, 1879.
Hamilton, W. J.	December 26, 1879.
Hamilton, Robert J.	November 10, 1888.
Hamlin, Elvira B.	June 14, 1888.
Hamlin, Jennie L.	April 8, 1889.
Hammond, Jennie M.	June 4, 1878.
Hammond, Hulda A.	December 26, 1879.
Hammond, Josiah Shaw	November 28, 1873.
Hammond, Joseph R.	July 12, 1886.
Hammond, Josiah S.	March 24, 1884.
Hammond, Carrie	July 29, 1885.
Hampton, Henry C.	January 2, 1886.
Hampton, Lizzie M.	November 10, 1888.
Hanchette, Emily A.	January 2, 1886.
Handsacker, John L.	January 2, 1886.
Hand, Miss M. Emma	December 26, 1879.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Hankensen, J. B.	January 27, 1881.
Hanna, Ross	December 26, 1879.
Hanscom, George T.	November 3, 1883.
Hanscom, Mattie L.	December 23, 1886.
Hanscom, Nathan C.	December 23, 1886.
Hapgood, Mrs. Emma	September 1, 1877.
Hardenbergh, Helen R.	July 12, 1886.
Hardy, Miss Irene	July 23, 1878.
Hardy, Mary M.	August 9, 1884.
Hare, Fanny May	May 17, 1884.
Harkness, Mary A.	December 31, 1887.
Harlon, James	September 24, 1867.
Harrigan, Mary A.	December 10, 1884.
Harrington, Alameda S.	August 20, 1881.
Harrington, Mary E.	July 16, 1883.
Harris, Ann Ella	December 26, 1879.
Harrison, Belle	March 17, 1883.
Harrison, Miss Ella	July 23, 1878.
Harrison, Ella	July 13, 1882.
Harry, Mrs. Sarah C.	June 13, 1881.
Hart, Ida L. E.	December 23, 1886.
Hart, Laura B.	March 17, 1883.
Hart, Pauline	June 13, 1871.
Hart, W. C.	February 17, 1873.
Hart, Christine	November 3, 1883.
Hart, Mrs. M. C.	May 28, 1879.
Hart, Laura B. (duplicate)	April 8, 1889.
Hartley, G. P.	December 26, 1879.
Hartley, Mrs. Marie D.	July 13, 1880.
Hartley, Mrs. Jennie E.	January 27, 1882.
Hartmeyer, Lottie A.	June 13, 1881.
Hartmeyer, Ella S. B. de	December 30, 1882.
Harvey, O. T.	September 29, 1879.
Haskett, Miranda	November 3, 1883.
Haskins, Joseph M.	May 1, 1883.
Hassen, Kate M.	December 23, 1886.
Haswell, Miss M. A.	December 26, 1879.
Hatch, Florence E.	July 23, 1878.
Hatch, Junius L.	December 4, 1875.
Hathaway, Mrs. Beverly B.	September 17, 1881.
Hatman, Minnie	July 16, 1883.
Hatton, Julia A.	July 23, 1878.
Havens, Carrie	May 5, 1877.
Hauck, Julia L.	May 28, 1879.
Haun, Mary F.	June 13, 1890.
Hawkins, Benj. A.	August 20, 1881.
Hawkins, Mary E.	January 23, 1885.
Hawks, Emma L.	November 3, 1883.
Hawley, Anna C.	March 30, 1880.
Hawley, Mary E.	April 8, 1889.
Hawes, Sara E.	December 27, 1888.
Hayes, John	January 29, 1876.
Hayes, Mrs. A. M. W.	September 1, 1877.
Haydon, Sarah F.	April 8, 1889.
Hayman, John E.	September 29, 1879.
Hays, Mary	August 9, 1884.
Hazen, P. J.	March 28, 1878.
Hazleton, Rosa H.	July 12, 1886.
Heard, Miss Sue V. (duplicate)	March 24, 1885.
Heath, H. H.	May 28, 1879.
Heath, May A.	May 17, 1884.
Heaton, Mary C.	December 26, 1879.
Hedden, Benjamin F.	December 31, 1887.
Heineberg, Laura	December 27, 1888.
Hemenway, Maria M.	July 23, 1878.
Heckman, W. H. H.	July 23, 1878.
Henderson, Janet M.	July 16, 1883.
Henderson, W. H.	September 29, 1879.
Henderson, Mary J.	September 19, 1882.
Hendry, Maggie	December 31, 1887.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Heney, Julia	May 28, 1879.
Heney, Libbie S.	September 20, 1889.
Henley, Clara L.	July 29, 1886.
Henley, Belle	November 10, 1888.
Hennessey, John E.	July 12, 1886.
Henning, David F.	September 24, 1878.
Henning, Irvin P.	June 1, 1875.
Henry, Sue J.	December 23, 1886.
Herbert, Thomas L.	February 9, 1884.
Herbst, A.	February 17, 1873.
Hermann, Theresa	May 17, 1884.
Herndon, Annie Celia	January 27, 1882.
Herrod, John	July 29, 1885.
Herrod, William	July 13, 1882.
Herron, Isaac G.	November 3, 1883.
Hershiser, Wm. A.	November 10, 1888.
Hetzal, Lennah	April 8, 1889.
Hewes, Mantha E.	April 1, 1882.
Hewes, J. M.	December 26, 1879.
Hewitt, Roscoe E.	May 5, 1877.
Hibbard, Louise	December 27, 1888.
Hickman, John B.	February 9, 1884.
Higby, H. C.	June 1, 1875.
Higgins, B. F.	September 29, 1879.
Hill, Harry G.	August 9, 1884.
Hill, Mrs. A. H.	February 17, 1873.
Hill, Alice M.	February 9, 1884.
Hill, E. K. (duplicate).	July 29, 1885.
Hills, Alfred F.	July 13, 1882.
Hill, Ava	September 20, 1889.
Hillman, Jeannette C.	April 8, 1889.
Hilton, Emma H.	September 29, 1879.
Hilton, Stephen	May 5, 1877.
Hinckley, Mrs. Elizabeth	September 29, 1879.
Hines, Gideon D.	July 23, 1882.
Hinton, J. W.	July 23, 1878.
Hitchcock, L. V.	March 13, 1879.
Hobe, Sophia A.	April 8, 1889.
Hobbs, Julia A.	May 17, 1884.
Hobbs, W. H.	March 13, 1879.
Hochheimer, Julia	June 14, 1889.
Hodge, James	July 12, 1886.
Hodgdon, Miss S. J.	December 13, 1872.
Hodgkins, Mary A.	May 28, 1879.
Hodgkinson, Kate	September 20, 1889.
Hoffman, Mrs. Mary L.	November 28, 1873.
Hogan, Miss M. J.	May 5, 1877.
Hoitt, Ira G.	December 27, 1866.
Hoitt, Julia B.	November 10, 1888.
Holbrook, Miss Nellie	May 28, 1876.
Holbrook, T. W. J.	December 27, 1866.
Holder, W. W.	November 11, 1871.
Holland, Bertha	July 12, 1886.
Holland, Helen E.	April 1, 1882.
Holland, Judson A.	December 23, 1886.
Hollenbeck, Mrs. B. L.	September 24, 1878.
Hollingsworth, Landon M.	June 14, 1888.
Hollopeter, Elmer E.	August 8, 1887.
Holloway, Elvira H.	July 13, 1882.
Holman, Stephen A.	January 23, 1885.
Holmes, Ada M.	August 8, 1887.
Holmes, Ahira	December 27, 1866.
Holmes, Ida M.	September 1, 1877.
Holmes, Ellis H.	December 17, 1866.
Holton, Abba L.	May 5, 1877.
Holway, Ruliff S.	March 24, 1885.
Holway, Mary A.	March 30, 1886.
Holyer, Sidney Ella	August 8, 1887.
Hoogs, Mary A.	April 1, 1887.
Hopkins, Kate E.	January 27, 1881.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Horn, Laura J.	November 22, 1884.
Hornicke, Mrs. Norah H.	September 20, 1889.
Horton, G. W.	May 5, 1877.
Houchins, Samuel	September 29, 1879.
Houchins, Edward A.	April 8, 1889.
Housh, William H.	November 3, 1883.
Houghton, Mrs. E. W.	December 27, 1886.
Houghton, Ella	May 17, 1884.
Howard, George W.	August 20, 1881.
Howard, Frank B.	July 16, 1883.
Howard, Lillian A.	January 2, 1886.
Howard, Benjamin	March 13, 1879.
Howard, Louise B.	May 4, 1888.
Howard, W. B.	July 13, 1880.
Howard, Mrs. Alice O.	September 20, 1889.
Howe, Mrs. Lucilla F.	September 19, 1882.
Howe, Mindora K.	May 17, 1884.
Howe, Edward P.	July 13, 1882.
Howe, Agnes E.	January 2, 1886.
Howe, Converse	June 1, 1875.
Howe, J. M.	September 24, 1867.
Howe, H. H.	May 27, 1868.
Howe, N. P.	July 23, 1878.
Hoy, Naomi E.	September 30, 1885.
Hoyt, H. E.	March 13, 1879.
Hoyt, Elizabeth E.	July 16, 1883.
Hoyt, Mrs. M. L.	March 28, 1878.
Hoyt, India H.	July 13, 1882.
Hubbell, Rebecca E.	May 1, 1883.
Hucks, Annie E.	January 5, 1875.
Huckins, Mr. Albertine	December 13, 1889.
Hudson, Mrs. Alice L.	September 20, 1889.
Hudson, J. A.	February 17, 1873.
Huff, Mrs. Mary B.	July 23, 1878.
Hughes, A. B.	May 5, 1877.
Hull, Clinton T.	December 26, 1879.
Humphrey, Ed. C.	August 20, 1881.
Humphrey, Mrs. M. S.	May 28, 1879.
Humphreys, Miss L. A.	June 22, 1874.
Humphreys, Miss M. A.	June 22, 1874.
Hunt, B. E.	November 11, 1876.
Hunt, Miss Carrie L.	March 9, 1870.
Hunt, Mrs. E. G.	March 13, 1879.
Hunt, Abbie L.	February 9, 1884.
Hunt, Mrs. M. C.	May 28, 1879.
Hunt, Ida L.	September 20, 1889.
Hunter, James S.	January 27, 1881.
Huntley, Antoinette M.	September 17, 1881.
Hursh, George W.	September 19, 1882.
Hutchings, Ada F.	July 12, 1886.
Hutton, Mrs. Lucy M.	September 1, 1877.
Hunter, John	March 28, 1878.
Huntsinger, Virginia M.	March 28, 1878.
Hurley, Miss J. M. A.	November 28, 1873.
Huskey, Frank G.	November 6, 1880.
Hussey, Walter R.	September 20, 1889.
Huston, Maggie	January 2, 1886.
Hutton, Charles E.	November 28, 1873.
Hyatt, Edward	November 10, 1888.
Hyatt, Frank H.	June 14, 1889.
Hyde, Isaac N.	August 8, 1887.
Hyde, Mary E.	December 16, 1882.
Hyde, William J.	November 6, 1880.
Hyman, Deborah	January 27, 1882.
Ingham, Oscar S.	March 13, 1879.
Ingraham, Duncan G.	July 23, 1878.
Ingram, Virginia C.	April 1, 1887.
Inskip, Philip	May 28, 1879.
Isaman, S. G.	May 28, 1879.
Itsell, A. J.	June 22, 1874.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Ives, Emily F.	January 29, 1882.
Jackman, Anna M.	March 28, 1878.
Jackman, Samuel H.	May 9, 1870.
Jacobs, Rebecca	February 9, 1884.
Jacobs, Celia	July 12, 1886.
Jacobs, Susie E.	November 10, 1888.
Jacobson, Josephine	August 8, 1887.
James, Mrs. L. C.	December 26, 1879.
Jamieson, Edward H.	December 26, 1879.
Jamison, Mary E.	April 8, 1889.
Janvier, Allen E.	September 29, 1879.
Jared, Lorenzo	February 3, 1887.
Jefferson, Dora	September 29, 1879.
Jenkins, Sarah B.	December 31, 1887.
Jenks, D. W.	May 5, 1877.
Jenne, Mary E.	November 10, 1888.
Jesse, Joseph E.	August 9, 1884.
Jessup, Miss S. A.	December 13, 1872.
Jewel, Ruby A.	January 23, 1885.
Jewett, Miss Annie	April 22, 1876.
Jewett, Miss Fidelia	March 28, 1878.
Jewett, Miss Susan N.	June 3, 1872.
Johns, Charles T.	November 11, 1871.
Johns, Anna Z.	March 28, 1878.
Johns, Charles T.	January 29, 1876.
Johnson, Annette	August 8, 1887.
Johnson, Clara M.	May 17, 1884.
Johnson, G. W.	September 29, 1879.
Johnson, Joseph G.	January 29, 1876.
Johnson, Phoebe F.	January 23, 1885.
Johnson, James G.	March 29, 1870.
Johnson, Annie M.	March 24, 1885.
Johnson, Julian W.	December 26, 1879.
Johnson, J. G.	December 26, 1879.
Johnson, Josie C.	December 31, 1887.
Johnson, Marie J.	December 31, 1887.
Johnson, Mrs. Una Paulk	April 1, 1882.
Johnston, Anna Mills	February 3, 1887.
Johnston, Jennie	July 12, 1886.
Johnstone, Mrs. R. R.	March 28, 1878.
Jones, Maud H.	February 9, 1884.
Jones, Josephine B.	November 22, 1884.
Jones, George W.	November 11, 1871.
Jones, J. Thurston	December 4, 1875.
Jones, Miss Sarah	May 28, 1879.
Jones, Chloe B.	April 1, 1882.
Jones, Julia	July 29, 1885.
Jones, Leslie	July 14, 1888.
Jones, Sallie J.	December 27, 1888.
Jones, Ella M.	April 8, 1889.
Jordan, Herbert H.	April 8, 1889.
Jordan, John F.	October 26, 1877.
Jory, T. C.	December 26, 1879.
Jory, Emma L.	June 13, 1881.
Joseph, Sarah N.	July 13, 1882.
Kane, Christina L.	August 8, 1887.
Kane, Richard (duplicate)	July 12, 1886.
Kane, George	July 29, 1885.
Kane, P. H.	November 10, 1888.
Kane, Mary A.	September 20, 1889.
Kaplan, Marie E.	December 13, 1889.
Karr, Anna Bell	April 8, 1889.
Kean, Annie M.	December 31, 1887.
Kearney, Arthur	December 26, 1879.
Keegan, Miss Mary A.	December 4, 1875.
Keep, Josiah	February 9, 1884.
Keeler, Mrs. Martha B.	September 20, 1889.
Keller, Lizzie F.	September 10, 1886.
Keller, Maggie	November 10, 1888.
Kelley, Mary R.	May 4, 1888.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Kelly, Lillian	March 17, 1890.
Kellogg, Amelia R.	February 3, 1887.
Kellogg, Franklin E.	May 17, 1884.
Kellogg, Adelbert E.	December 30, 1882.
Kelly, Susie E.	July 12, 1886.
Kendall, Mrs. C. S.	October 26, 1877.
Kendall, Marion A.	December 27, 1888.
Kelsey, Darwin N.	May 4, 1888.
Kelly, Lettie K.	November 3, 1883.
Kelsey, Sarah G.	March 30, 1886.
Kelso, John R.	April 26, 1876.
Kelso, Luella	December 30, 1882.
Kelton, Mrs. M. A.	March 13, 1876.
Keniston, Charles M.	January 27, 1882.
Kennedy, J. T.	November 11, 1876.
Kennedy, J. G.	November 11, 1871.
Kennedy, Thomas E.	May 28, 1879.
Kennedy, W. W.	November 11, 1871.
Kennedy, John	December 26, 1879.
Kennedy, N.	September 24, 1878.
Kenny, Maria F.	December 31, 1887.
Kent, Isabella	May 5, 1877.
Kent, W. F.	March 13, 1879.
Kenyon, Ferdinand	January 27, 1882.
Kercheval, Jennie G.	November 25, 1869.
Keran, A. P.	September 29, 1879.
Keran, J. N.	September 29, 1879.
Kermode, William	November 22, 1884.
Kerr, A. W.	September 29, 1879.
Kertchum, Mary E.	November 10, 1888.
Kidder, Mrs. Sophia	March 28, 1878.
Kilgour, Jennie C.	July 29, 1885.
Kilpatrick, E. C. (duplicate)	December 30, 1882.
Kimball, C. H.	September 1, 1877.
Kimball, George H.	April 1, 1887.
Kimball, Miss T.	December 26, 1879.
Kimball, Mary S.	December 26, 1879.
Kincaid, Mrs. Mary W.	June 29, 1876.
King, Florella	July 23, 1878.
King, Alicia A.	January 2, 1886.
King, Cynthia J.	December 23, 1886.
King, Jessie I.	June 13, 1890.
Kingman, Mrs. Mary V.	December 4, 1875.
Kinkade, Letitia	November 11, 1876.
Kinne, H. C.	June 3, 1872.
Kirch, Lizzie C.	March 28, 1878.
Kirk, T. J.	May 28, 1879.
Kirkland, Cordelia	May 1, 1883.
Kirkpatrick, J. M.	November 25, 1869.
Kirkwood, William A.	April 1, 1887.
Kissling, Rosa	November 10, 1888.
Kister, Mrs. Naomi Angell	June 13, 1890.
Kitto, Marguerite L.	December 13, 1889.
Kleeberger, George R.	December 26, 1879.
Klench, T. J.	November 11, 1876.
Kline, Charles G.	January 2, 1886.
Kline, Elisha B.	May 4, 1888.
Klink, Jean S.	September 20, 1889.
Klippel, Emelia C.	March 17, 1890.
Knight, D. S.	September 24, 1878.
Knighton, W. A.	December 26, 1879.
Knowlton, Ebenezer	December 27, 1866.
Knowlton, E. L.	September 1, 1877.
Knowlton, George H.	December 31, 1887.
Knowlton, Josephine	July 16, 1883.
Koenig, Edward J.	April 8, 1889.
Kraft, E. H.	September 17, 1881.
Kraft, George K.	December 23, 1886.
Kratzer, Leah	May 5, 1877.
Kratzer, Sarah	November 22, 1884.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Kraus, Sophia M. F.	July 29, 1884.
Lacy, Jasper N.	February 3, 1887.
Lafferty, J. M.	May 5, 1877.
La Grange, S. Ella	September 19, 1882.
Laird, Marie E.	September 24, 1878.
Lafranchi, Mrs. C.	March 28, 1878.
Lelande, Blanche	June 14, 1887.
Lamb, Miss Irene	November 28, 1873.
Lambie, Christina	July 12, 1886.
Lambert, Dan.	December 26, 1879.
Langstader, Pauline	December 16, 1882.
Laning, Frank	December 25, 1886.
Larew, James A.	December 23, 1886.
Larew, Peter	December 26, 1879.
Larew, William H.	September 17, 1881.
Larkin, H. Christine	December 23, 1886.
Larkin, Elwood D.	December 30, 1882.
Larrabee, Peter S.	June 13, 1881.
Leadbeater, Mrs. Irene.	June 13, 1881.
Leadbeater, W. R.	July 12, 1880.
Leahy, Mary	July 29, 1885.
Lechler, Ida A.	December 23, 1886.
Lee, Harriet J.	December 31, 1887.
Lee, Delight Swift	April 1, 1882.
Lee, Hattie	December 27, 1888.
Leech, Marion V.	July 12, 1886.
Leek, William H.	July 16, 1883.
Le Fevre, J. P.	July 13, 1880.
Leggett, Kate	August 9, 1884.
Leggett, Joseph	June 3, 1872.
Leggett, William A.	June 14, 1887.
Lehan, M. S.	July 23, 1878.
Leighton, Leon	January 23, 1885.
Leininger, Etta	July 16, 1883.
Lemon, Josephine	May 4, 1888.
Leonard, Susie T.	July 29, 1885.
Leppien, Dora H.	December 30, 1882.
L'Hote, Mrs. Mary F.	January 27, 1882.
Levinson, Miss Rosa	June 3, 1872.
Levi, Daniel	November 28, 1873.
Lewis, Clelia M.	May 5, 1877.
Lewis, J. S.	December 26, 1879.
Lewis, Julia	June 14, 1889.
Libby, George F.	May 4, 1888.
Libby, Mrs. Josephine S.	July 23, 1878.
Lieginger, Henry	June 12, 1880.
Lighte, Miss Pauline	December 26, 1879.
Lightall, G. E.	March 14, 1875.
Lillie, John B.	December 4, 1875.
Lillie, Miss S. P.	March 28, 1878.
Lindberg, Emily U.	December 16, 1882.
Linscott, John W.	March 28, 1878.
Lipman, Matilda E.	February 9, 1884.
Lipowitz, Max	December 4, 1875.
Lipowitz, Ellen	April 8, 1889.
Lisson, Tillie C.	June 14, 1889.
Little, Mary	March 3, 1879.
Little, Frederick E.	January 2, 1886.
Little, Maggie E.	July 12, 1886.
Little, Cinda	May 28, 1879.
Little, Lizzie B.	April 1, 1887.
Littlefield, Nellie A.	December 16, 1882.
Littlefield, J. D.	December 27, 1866.
Lloyd, D. M.	September 29, 1879.
Lloyd, Julius	March 28, 1878.
Lloyd, Miss Mary A.	July 23, 1878.
Lloyd, William	August 29, 1881.
Loofburrow, E.	March 28, 1878.
Loofburrow, Mary	November 22, 1884.
Loomis, Miss Amanda	December 15, 1868.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
London, Jacques	January 29, 1876.
Long, Orpha Amelia	June 13, 1881.
Lorain, John	January 27, 1881.
Loring, Mrs. Martha W.	March 13, 1879.
Lottman, B. Dena	March 17, 1890.
Loud, Emily S.	November 10, 1888.
Loucks, Annie	June 4, 1887.
Loughran, Susie F.	May 4, 1888.
Love, Josephine	May 4, 1888.
Love, Frank R.	August 9, 1884.
Lovejoy, Emma	June 13, 1890.
Lovell, Jennie E.	December 31, 1887.
Lovett, C. M.	January 5, 1876.
Lovett, William B.	June 13, 1881.
Lowe, Mrs. A.	September 1, 1887.
Low, E. Adelia	May 4, 1888.
Lowe, Emma T.	September 28, 1879.
Lowe, Miss S. E.	December 26, 1879.
Lowell, John Marshall	July 23, 1878.
Lubeck, Mrs. Julia M.	January 5, 1875.
Luckey, George W. A.	December 27, 1888.
Luckey, Bertha M.	December 27, 1888.
Lundt, Jennie C.	March 30, 1886.
Lyman, Byron G.	June 13, 1881.
Lynch, Miss Frances	December 27, 1866.
Lynch, Maggie M.	June 14, 1887.
Lynch, Nellie R.	May 4, 1888.
Lynch, Mrs. Tillie L.	March 13, 1879.
Lynch, W. F. B.	November 11, 1876.
Lynch, Mary A.	June 13, 1890.
Lynch, Alice E.	April 8, 1889.
Lyon, Timothy J.	January 2, 1886.
Lyser, Albert	October 26, 1877.
Lysinger, Emma L.	September 30, 1885.
Macdonald, Miss Kate	July 23, 1878.
Mack, George C.	December 27, 1866.
Mack, George F.	September 24, 1878.
Magoon, W. H.	July 23, 1878.
Mackall, J. N.	December 13, 1872.
Macphee, D. A.	September 29, 1879.
Madden, Adelia	May 4, 1888.
Madden, Agnes G.	February 3, 1887.
Maddux, Mary Polhemus.	March 17, 1890.
Maddrill, Ellie	December 31, 1887.
Maguire, Louise	September 29, 1879.
Magner, Mary	August 8, 1887.
Main, W. Fred.	March 24, 1885.
Makinney, H. E.	December 15, 1868.
Malcolm, Norman E.	June 13, 1890.
Malloch, James	April 8, 1889.
Mallory, Ida R.	March 30, 1886.
Manchester, M. R.	June 13, 1881.
Manley, George P.	July 13, 1880.
Mann, S. Jennie	December 16, 1882.
Mann, Azro L.	November 29, 1867.
Manning, Miss Agnes M.	November 28, 1873.
Manning, Delia	September 10, 1886.
Manzer, John	September 29, 1879.
Marett, Sabina A.	June 13, 1890.
Marcus, Mrs. Emma C.	July 23, 1878.
Markley, Julia M.	September 30, 1885.
Markley, Jennie S.	November 10, 1888.
Marshall, Carl C.	March 24, 1885.
Markham, Charles E.	December 28, 1879.
Marks, Bernard	June 8, 1866.
Marshall, Marilla	December 30, 1882.
Marsh, Addie	November 10, 1888.
Martin, Edith J.	December 16, 1882.
Martin, Lillie J.	March 17, 1890.
Martin, A.	November 11, 1876.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Martin, Joseph G.	July 12, 1886.
Martin, Ada	July 12, 1886.
Martin, Mrs. Fannie McG.	January 27, 1882.
Martin, Mrs. Mary J.	July 13, 1882.
Martin, Julia C.	September 10, 1886.
Martin, Aurelius F.	November 22, 1884.
Martin, John W.	August 8, 1887.
Marts, Mary	May 4, 1888.
Marsh, Mrs. S. W.	June 13, 1871.
Marthing, J. A.	July 23, 1878.
Marston, C. E.	September 29, 1879.
Mason, Gertrude H.	February 9, 1884.
Mason, W. H.	March 13, 1879.
Mason, Cannie	June 14, 1889.
Mason, Leola I.	November 10, 1888.
Mathews, Lizzie	May 4, 1888.
Mathews, Newell	December 26, 1879.
Mathews, Mack	July 12, 1886.
Mathews, Mary	January 27, 1882.
Mathews, Mary E.	July 13, 1882.
Mathews, Frank	March 17, 1890.
Mathieson, Grace	May 4, 1888.
Maurer, John L.	January 27, 1882.
Maxwell, Walter	September 29, 1879.
May, Mrs. Nantie Adams	January 27, 1882.
Mayhew, Mrs. H. A.	March 13, 1879.
Mayer, Charlotte	March 17, 1890.
Mayer, Jessie	March 17, 1890.
Maze, Jennie	May 4, 1888.
McAdams, Ida	August 9, 1884.
McAdams, William C.	January 27, 1882.
McAllen, Maggie	November 22, 1884.
McArthur, Anna	May 5, 1877.
McArthur, A. W.	May 28, 1879.
McBride, H. E.	January 5, 1875.
McCabe, E. B.	December 26, 1879.
McCall, J. M.	December 26, 1879.
McCann, Miss M. E.	December 26, 1879.
McCarthy, Mrs. M. E.	December 26, 1879.
McCarthy, F. H.	November 11, 1876.
McCarthy, A. F.	January 5, 1875.
McCarthy, Kate A.	February 3, 1887.
McCauley, Annie	December 31, 1887.
McClure, Mary D.	February 3, 1887.
McClure, Susie M.	May 4, 1888.
McClure, Martha R.	March 30, 1886.
McClymonds, J. W.	September 29, 1879.
McClymonds, Virginia M.	April 1, 1882.
McConnell, James J.	March 24, 1885.
McConnell, Quinette O.	June 4, 1887.
McCord, Alice A.	June 4, 1887.
McCormack, Miss Harriet	April 22, 1876.
McConoughey, Ella	March 17, 1890.
McCourt, James	November 3, 1883.
McCourt, Charles A.	July 29, 1885.
McCourt, Robert	June 14, 1887.
McCoy, John M.	September 30, 1885.
McCowan, Mrs. Mary E. P.	August 20, 1881.
McCroskey, R. C.	July 23, 1878.
McChesney, J. B.	July 5, 1887.
McCulloch, H. E.	July 23, 1878.
McCutchan, Hugh H.	November 22, 1884.
McDaniel, Ella	November 3, 1883.
McDermott, Annie F.	November 22, 1884.
McDonald, A. H.	December 15, 1868.
McDonald, Mrs. A. H.	January 5, 1875.
McDonald, Jonathan T.	July 29, 1885.
McDonald, Julia	March 30, 1886.
McDonald, B. F.	December 26, 1879.
McDonald, May A.	December 26, 1879.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
McDonald, Mary M.	January 27, 1882.
McDonald, Ida V.	September 20, 1889.
McDonnell, Kate.	September 10, 1886.
McDowell, T. K.	September 29, 1879.
McEwen, John H.	September 1, 1877.
McFadden, Mrs. Agnes	January 5, 1875.
McFadden, W. M.	March 14, 1876.
McFadden, Kate	December 26, 1879.
McFarland, Nellie F.	March 30, 1886.
McGregor, Annie.	August 9, 1884.
McGregor, Annie A.	August 9, 1884.
McGlashan, C. F.	April 22, 1879.
McGrann, Cora F.	December 26, 1886.
McHugh, Peter	March 13, 1879.
McIndoe, Miss O.	December 26, 1879.
McKay, Mrs. H. M.	December 26, 1879.
McKean, William G.	August 20, 1881.
McKee, Ellen F.	November 22, 1884.
McKenna, Edward	February 3, 1887.
McKennon, Mary L.	February 3, 1887.
McKenzie, Margaret	January 29, 1876.
McKenzie, Mrs. Emma W.	June 13, 1890.
McKillop, A.	December 26, 1879.
McKown, Mrs. M. E.	May 28, 1879.
McKusick, H. P.	August 20, 1881.
McIntosh, Mrs. Kate	September 19, 1882.
McLaughlin, Alex. C.	May 4, 1888.
McLaughlin, Agnes	December 31, 1887.
McLaughlin, Kate C.	January 27, 1882.
McLean, Allan	February 9, 1884.
McLellan, Mary B.	May 4, 1888.
McLeod, Edith.	June 14, 1889.
McMeans, A. C.	July 23, 1878.
McMeekan, Eliza J.	December 16, 1882.
McMillin, Lizzie R.	December 26, 1879.
McMillan, J. G.	May 28, 1879.
McMullan, Emily	December 26, 1886.
McNair, Martha J.	November 22, 1884.
McNamer, John P.	August 20, 1881.
McNear, Lucy C.	December 10, 1884.
McNicoll, Belle	December 16, 1882.
McPhail, J. S.	September 29, 1879.
McPhail, Fannie A.	July 12, 1886.
McPhee, Mary V.	September 24, 1878.
McPhee, Angus	March 17, 1890.
McPherron, Asbury S.	September 10, 1886.
McPherron, John M.	July 12, 1886.
McPherson, Stephen	March 28, 1878.
McPherson, W. G.	May 28, 1879.
McPherson, Mrs. S. M.	September 29, 1879.
McPherson, A. B.	November 6, 1880.
McStay, Josephine C.	July 12, 1886.
McVenn, Gertrude E.	September 20, 1889.
Meades, S. P.	December 26, 1879.
Meek, Anna P.	September 29, 1879.
Megahan, Ambrose	September 19, 1882.
Megerle, Lisetta	March 17, 1890.
Meehan, Margaret G.	June 13, 1890.
Meginity, Mrs. M. P.	September 29, 1879.
Melrose, Mrs. Mary H.	September 29, 1879.
Menary, Kate H.	November 10, 1888.
Menefee, C. A.	November 11, 1871.
Menges, Miss Carrie A.	July 23, 1878.
Mercer, Mary A.	June 4, 1887.
Meredith, David M.	July 29, 1885.
Meredith, Charles T.	May 4, 1888.
Merriman, Clarissa L.	June 14, 1889.
Merrill, Mrs. M. D.	December 26, 1879.
Merritt, Helen W.	December 31, 1887.
Merritt, Jennie S.	April 1, 1887.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Merritt, Julia	September 29, 1879.
Mervin, Charles E.	July 23, 1878.
Metcalf, George S.	August 8, 1887.
Metcalf, Miss Mary F.	March 28, 1878.
Metzger, J. E.	December 26, 1879.
Metzger, C. L.	January 5, 1875.
Metzler, John A.	January 23, 1885.
Michener, Mary E.	July 23, 1878.
Middleton, Mrs. Eliza F.	June 1, 1875.
Miers, Charles F.	November 6, 1880.
Miles, Mrs. S. A.	March 28, 1878.
Miley, Annette D.	November 10, 1888.
Millette, Percival C.	March 14, 1871.
Miller, Miss Emma J.	July 23, 1878.
Miller, Miss N. J.	September 1, 1877.
Miller, Emma A.	November 22, 1884.
Miller, Lafayette.	May 5, 1877.
Miller, Ora E.	November 28, 1873.
Miller, Isabella A.	January 23, 1885.
Miller, Miss Sarah E.	May 5, 1877.
Miller, Mrs. E. K.	December 26, 1879.
Miller, Belle	June 13, 1880.
Miller, Sallie C.	September 20, 1889.
Miller, Ida V.	April 8, 1889.
Miller, Florence C.	September 19, 1882.
Miller, Minnie E.	January 2, 1886.
Milliken, Ellen A.	November 28, 1873.
Mills, Mary H.	August 9, 1884.
Mills, Alice	July 16, 1883.
Mills, Maimie	November 10, 1888.
Mills, Myron	November 3, 1883.
Miner, Mary E. L.	May 4, 1888.
Miner, Eda L.	June 13, 1890.
Minor, Grace D.	September 20, 1889.
Minns, George W.	June 8, 1896.
Mitchell, John D.	December 30, 1882.
Mitchell, A. Judson	May 17, 1884.
Mitchell, Katie	January 27, 1882.
Mix, Christiania A.	December 23, 1886.
Mize, Thomas J.	December 23, 1886.
Mock, Alonzo W.	November 10, 1888.
Mock, Arthur	November 10, 1888.
Molyneaux, Frank A.	June 13, 1890.
Monaghan, Lizzie C.	December 13, 1889.
Monroe, Joseph J.	March 17, 1890.
Molloy, Bessie	January 27, 1882.
Montgomery, Annie C.	May 28, 1879.
Montgomery, Frank P.	November 10, 1888.
Moore, Anna J.	October 26, 1877.
Moore, Elbertas L.	February 3, 1887.
Moore, Fannie A.	June 14, 1888.
Moore, Mrs. Mary B.	December 4, 1875.
Moore, Matilda E.	December 16, 1882.
Moore, Nannie	July 29, 1885.
Moore, Etta J.	September 10, 1886.
Moorehead, Samuel L.	August 9, 1884.
Moores, Charles W.	March 24, 1885.
Moores, Mary B.	January 2, 1886.
Morford, S. O.	September 26, 1879.
More, Ira	September 1, 1877.
Morey, Sabie E.	January 2, 1886.
Morey, Fanny	March 17, 1890.
Morford, N. A.	December 26, 1879.
Morford, Kate M.	August 20, 1881.
Morgan, Helen A.	August 20, 1881.
Morgan, Richard	January 27, 1881.
Morgan, Jennie	September 30, 1885.
Morgan, George P.	July 12, 1886.
Morgan, Miss Rose E.	September 1, 1877.
Morgan, H. J.	July 23, 1878.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Morley, Grace	August 20, 1881.
Morrill, Joseph C.	September 24, 1867.
Morrill, Alice	April 8, 1889.
Morris, Mary E.	June 14, 1889.
Morris, William D.	July 16, 1883.
Morris, Matilda Parker	July 23, 1878.
Morris, N. Z.	November 28, 1873.
Morrison, Mary E.	June 14, 1888.
Morse, Augustus, Jr.	November 29, 1867.
Morse, Georgia C.	November 10, 1888.
Morse, H. A.	March 13, 1879.
Morse, S. A.	July 23, 1878.
Morton, Carrie L.	December 23, 1886.
Morton, Ella J.	December 31, 1887.
Morton, Robert A.	July 13, 1882.
Mosher, W. C.	December 26, 1879.
Mott, Mrs. Mary T.	January 27, 1881.
Moulthrop, Mary S.	August 9, 1884.
Moulton, James S.	April 8, 1889.
Moulty, Adele C.	August 9, 1884.
Mower, Francis O.	January 27, 1882.
Mower, Miss E.	September 29, 1879.
Mulgrew, Mary T. A.	May 4, 1888.
Mullen, Harriet M.	January 27, 1882.
Mumford, Mrs. M. E.	April 22, 1876.
Munday, M. E. C.	December 26, 1879.
Munson, Josephine E.	May 17, 1884.
Munson, J. P.	March 13, 1879.
Murdock, Maria E.	January 23, 1885.
Murdoch, Grace R.	June 13, 1890.
Murnan, Frank T.	June 14, 1889.
Murnan, John T.	July 16, 1883.
Murphy, Miss Mary M.	June 1, 1875.
Murphy, C. H.	December 26, 1879.
Murphy, Ella Frances	June 13, 1890.
Murrish, Harry T.	March 17, 1890.
Murry, Addie	September 30, 1879.
Murray, L. Jenny	December 31, 1887.
Murray, Mrs. Maggie	March 28, 1878.
Murtha, Richard E.	July 12, 1886.
Muth, Hattie	August 9, 1884.
Myers, Lena M.	November 10, 1888.
Myrick, Thomas S.	December 27, 1866.
Myrick, Elizabeth B.	February 3, 1887.
Myrick, Geo. F.	August 8, 1887.
Nachtrieb, Annie D.	July 29, 1885.
Nagle, Mary	December 31, 1887.
Nash, John C.	January 27, 1882.
Nattinger, Addie G.	July 16, 1883.
Neary, Annie J.	June 4, 1887.
Neil, Susie J.	February 9, 1884.
Neill, Charles L.	January 2, 1886.
Nellis, William	November 6, 1880.
Nelson, Jeanette	November 6, 1880.
Nelson, Henry A.	March 14, 1871.
Nesbitt, Jennie W.	March 28, 1878.
Newberry, Harriet K.	January 27, 1882.
Newberry, Carrie J.	July 16, 1883.
Newberry, Ella A.	April 1, 1887.
Newby, Ellsberry	August 8, 1887.
Newcomer, Jacob	September 29, 1879.
Newell, E. C.	March 13, 1879.
Newton, Hulda N. S.	January 27, 1882.
Nicewonger, Agnes H.	June 13, 1890.
Nichols, F. A. E.	March 13, 1879.
Nichols, Nettie S.	December 16, 1882.
Nicholson, Thomas	June 22, 1874.
Nickerson, William A.	July 29, 1885.
Nickerson, W. A.	December 26, 1879.
Norman, Nellie M.	January 22, 1885.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Norman, L. F.	November 11, 1876.
Norris, Jennie A.	June 13, 1881.
North, Emeline M.	September 30, 1885.
Northen, Mary J.	January 2, 1886.
Norton, Fred. C.	August 20, 1881.
Norvell, Joseph A.	January 27, 1882.
Nusbaumer, Florence	July 16, 1883.
Nutting, H. N.	December 27, 1866.
Nutting, Wm. L.	August 8, 1887.
O'Brien, Kate	January 27, 1881.
O'Brien, Miss Juliet F.	December 26, 1879.
O'Connor, Joseph	March 14, 1871.
O'Connor, Maria E.	January 29, 1876.
O'Connor, Mary	December 23, 1886.
O'Donnell, Mary E.	July 12, 1886.
O'Dwyer, James	June 22, 1875.
Oglesby, Miss M. A.	December 26, 1879.
O'Hara, Kate F.	November 10, 1888.
O'Loughlen, Nellie	September 29, 1879.
O'Leary, Katie R.	January 27, 1882.
Olinger, A. F.	December 13, 1872.
Oliver, A. W.	January 29, 1876.
Oliver, J. C.	September 1, 1877.
Olmstead, Theodore	July 29, 1885.
Oman, Mrs. Alice S.	September 29, 1879.
Oman, G. W.	September 29, 1879.
O'Neal, Mary L.	July 29, 1885.
O'Neil, Mary	August 8, 1887.
O'Neill, J. G.	September 24, 1878.
Orr, Alfred R.	December 16, 1882.
Orr, Lizzie L.	December 16, 1882.
Ortega, Canpolican	September 30, 1884.
Ortega, Dario M.	July 16, 1883.
Orton, Frances B.	June 13, 1890.
Osborne, John S.	June 14, 1889.
Osborn, C. V.	December 26, 1879.
Otis, Charles W.	November 28, 1873.
Otis, Frank P.	August 9, 1884.
Owsley, Clara M.	December 13, 1889.
Overend, Miss Lizzie	November 28, 1873.
Overend, Elizabeth	July 13, 1882.
Owen, Phebe R.	July 13, 1882.
Owen, Mrs. H. D.	May 28, 1879.
Owen, Susie	November 6, 1880.
Owens, Miss Nellie M.	May 28, 1879.
Owens, Sarah L.	June 14, 1888.
Packard, Lizzie A.	March 24, 1885.
Paine, Alice V.	January 23, 1885.
Paine, C. R.	March 13, 1879.
Palmer, Miss R. M.	September 24, 1878.
Palmer, Angie C.	November 10, 1888.
Panabaker, Charles S.	December 30, 1882.
Panabaker, Edward E.	June 4, 1887.
Pardee, Carrie	July 16, 1883.
Pardee, Helen N.	April 1, 1887.
Parker, James L.	March 28, 1878.
Parker, Jean	March 14, 1871.
Parker, Mrs. F. A.	May 5, 1877.
Parker, Edward A.	February 9, 1884.
Parker, Hattie	December 23, 1886.
Parkinson, Thomas A.	June 14, 1889.
Parkinson, Charles E.	February 9, 1884.
Paris, Mrs. Alice C.	September 20, 1889.
Parnell, Eben H.	September 20, 1889.
Parsons, Austin F.	February 3, 1887.
Pascoe, Miss Mary J.	June 3, 1872.
Patchett, Virginia	February 9, 1884.
Paterson, John	December 31, 1887.
Patterson, Eliza S.	March 13, 1879.
Patterson, Isabelle	November 6, 1880.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Patterson, Alma	June 14, 1889.
Patton, Herbert	December 26, 1879.
Patton, Martha A.	July 13, 1882.
Patton, Jessie R.	December 23, 1886.
Paul, Miss R. P.	September 29, 1879.
Peachy, Thomas G.	September 1, 1877.
Pearson, Emily F.	March 13, 1875.
Pease, Clarence A.	January 27, 1882.
Pechin, Mrs. Celina R.	January 27, 1882.
Peck, Annie E.	November 10, 1888.
Peck, George H.	June 11, 1875.
Peck, Kate E.	March 13, 1879.
Pedlar, Mrs. Glendora H.	June 13, 1881.
Pedlar, F. A.	December 26, 1879.
Peiser, Flora	November 22, 1884.
Pettit, E. T.	September 29, 1879.
Pettit, Harriet L.	November 3, 1883.
Pelham, Mary E.	May 1, 1883.
Pelton, John C.	December 27, 1866.
Pendergast, Coloma C.	July 12, 1886.
Pendergast, H. B.	July 23, 1878.
Penwell, S. A.	June 20, 1868.
Pepper, Michael W.	June 13, 1890.
Perkins, Alice E.	June 14, 1889.
Perry, Julia	November 22, 1884.
Perry, Emma L.	July 12, 1886.
Peterson, Annie F.	August 9, 1884.
Phalin, A. M.	March 28, 1878.
Phelan, Michael J. J.	March 30, 1886.
Phelps, Mrs. Alta C.	June 13, 1881.
Phelps, Mrs. A. M.	December 26, 1879.
Phelps, Mary	April 1, 1887.
Phelps, Neil S.	November 3, 1883.
Phillips, M. A. E.	June 13, 1881.
Phillips, Hannah	November 22, 1884.
Phillips, Laura J.	April 8, 1889.
Phillips, Mollie J.	September 20, 1889.
Phillips, Thomas J.	September 20, 1889.
Phillips, Vinnie	December 13, 1889.
Phipps, Samson C.	March 24, 1886.
Pierce, Edward T.	January 2, 1886.
Pierce, Belle W.	January 2, 1886.
Pierce, Augusta	March 17, 1890.
Pierpont, Maria G.	December 31, 1887.
Pillot, Mary A.	July 12, 1886.
Piper, Wyman B.	August 9, 1884.
Pitcher, Charlotte M.	May 28, 1879.
Pleasants, G. W.	June 12, 1890.
Plummer, Albertine	January 23, 1885.
Plummer, Amos W.	August 8, 1887.
Payler, Georgia B.	August 8, 1887.
Poage, John A.	July 13, 1882.
Poage, Mrs. Lelia S.	July 13, 1882.
Pollard, W. D.	September 29, 1879.
Polly, Annie F.	February 9, 1884.
Poole, William W.	July 29, 1885.
Poole, Ella M.	April 8, 1889.
Porter, Mrs. Annie S.	June 13, 1890.
Porterfield, Anna	May 4, 1888.
Post, Nellie M.	January 2, 1886.
Potter, Mrs. H. A.	May 5, 1877.
Potter, M. B.	March 14, 1871.
Powell, Miss Elizabeth	June 1, 1875.
Powell, Emma J.	February 3, 1887.
Power, Thomas W.	March 24, 1885.
Power, Kate B.	July 12, 1886.
Power, Frank	November 11, 1871.
Power, Marvin	December 26, 1879.
Powers, T. P.	March 13, 1879.
Powers, A. M.	December 26, 1879.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Powers, Mrs. E. T.	December 26, 1879.
Powers, Vesta	August 8, 1887.
Prag, Mrs. Mary	September 1, 1877.
Pratt, Elvira	November 11, 1876.
Pratt, A. L.	December 26, 1879.
Pray, Mattie J.	September 29, 1879.
Prescott, Miss D. S.	March 14, 1871.
Prescott, Annie M.	August 20, 1881.
Preston, E. M.	May 21, 1869.
Prewitt, James	December 26, 1879.
Price, Harrison	December 26, 1879.
Price, Caroline	November 29, 1867.
Price, Ella M.	July 29, 1885.
Price, Elon A.	December 23, 1886.
Price, William H., Jr.	January 27, 1882.
Price, Thomas S.	September 20, 1889.
Prior, Philip	March 14, 1871.
Pritchard, Mrs. S. M.	March 28, 1878.
Pritchard, V. P.	September 1, 1877.
Provost, Charlotte E.	July 12, 1886.
Prowdley, Mary A.	July 29, 1885.
Pugh, Mrs. F. M.	May 29, 1879.
Pullen, Samuel J.	June 13, 1881.
Purnell, Elizabeth B.	May 1, 1883.
Putnam, J. E.	December 4, 1875.
Raclet, Victorine M.	September 30, 1885.
Radford, Cassie M.	September 20, 1889.
Rafferty, Abner L.	July 13, 1882.
Ragan, Denis F.	April 1, 1887.
Rager, George W.	May 17, 1884.
Raines, John W.	January 2, 1886.
Raines, James L.	January 27, 1882.
Rainey, Marion	March 30, 1886.
Ramsey, William C.	March 30, 1886.
Rambo, Anna M.	July 12, 1886.
Randall, A. H.	June 19, 1868.
Randall, Mrs. A. H.	May 5, 1877.
Randolph, Lucy N.	November 22, 1884.
Raney, Addie M. C.	May 4, 1888.
Raney, S.	December 26, 1879.
Rankin, Belle	November 6, 1880.
Ransdel, Violanta S.	April 1, 1882.
Rathbun, Charles W.	June 4, 1887.
Rattan, Volney	June 22, 1874.
Raub, Samuel H.	January 27, 1881.
Raven, H. S.	December 26, 1879.
Rayl, Mrs. M. R.	May 5, 1877.
Raymond, Mrs. H. A.	December 26, 1879.
Raymond, Miss Mary T.	December 26, 1879.
Ready, R. W.	September 29, 1879.
Reardon, W. H.	December 26, 1879.
Reardon, Josie.	September 20, 1889.
Reasoner, Anna S.	March 25, 1875.
Reavis, W. F. S.	July 23, 1878.
Redding, Mrs. Dora C.	June 13, 1881.
Redmond, Mary T.	September 20, 1889.
Redway, Jacques	January 29, 1876.
Reed, Dayton A.	July 23, 1878.
Reed, Mrs. Mary F.	September 29, 1879.
Reed, David C.	September 20, 1889.
Reed, Mattie A.	June 13, 1890.
Rees, Alma	August 9, 1884.
Reese, John W.	March 17, 1883.
Regan, Josie J.	November 10, 1888.
Reilly, Michael J.	May 4, 1888.
Renek, Ida H.	December 31, 1887.
Renfro, Lewis C.	December 26, 1879.
Renfro, James H.	September 20, 1889.
Reynolds, Mrs. E. W.	December 26, 1879.
Reynolds, Mrs. F. E.	December 13, 1872.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Reynolds, Smith K.	February 3, 1887.
Rhodes, L. G.	June 12, 1880.
Rice, Julius A.	July 29, 1885.
Rice, George	June 13, 1881.
Rich, Hannah M.	September 20, 1889.
Richards, V. P.	March 28, 1878.
Richards, George C.	December 30, 1882.
Richardson, Irene.	January 2, 1886.
Richardson, George A.	July 12, 1886.
Richardson, Noble A.	December 31, 1887.
Richmond, Hiram H.	September 30, 1885.
Riehl, Katherine M.	April 1, 1887.
Rieser, Mrs. Edwin O.	August 20, 1881.
Rightmire, Miss S. A.	May 28, 1879.
Righter, F. M.	December 26, 1879.
Riley, J. H.	November 11, 1876.
Riley, Ella	September 29, 1879.
Riley, John F. (duplicate).	July 29, 1885.
Riley, Peter T.	March 24, 1885.
Riley, James Alexander	January 27, 1882.
Ring, Orvis	July 16, 1883.
Rise, Mrs. M. E.	March 28, 1878.
Ritter, F. Willard	June 14, 1889.
Ritter, Carlton M.	December 16, 1882.
Roache, Edith Z.	April 1, 1882.
Roberts, Orris H.	July 12, 1886.
Roberts, B. F.	July 23, 1878.
Roberts, Carrie.	December 30, 1882.
Roberts, Mary E.	July 16, 1883.
Robertson, Margerey C.	August 20, 1881.
Robertson, William A.	June 13, 1881.
Robertson, Miss A. C.	September 24, 1878.
Robinet, Eugenie R.	December 27, 1888.
Robinett, Margaretta	November 22, 1884.
Robinson, Mrs. M. S. P.	September 29, 1879.
Robinson, George E.	September 24, 1878.
Robinson, Emma	January 2, 1886.
Robinson, Robert E.	February 9, 1884.
Robinson, W. H. J.	December 26, 1879.
Roche, Annie J.	March 30, 1886.
Rockwood, Josephine.	March 24, 1885.
Rodgers, William J.	March 24, 1885.
Rogers, Emma J.	December 26, 1879.
Rogers, Isabella D.	December 31, 1887.
Rogers, James	January 29, 1876.
Rogers, D. B. H.	September 29, 1879.
Root, Alice M.	December 31, 1887.
Root, Mollie E.	January 27, 1882.
Root, Leilla A.	November 3, 1883.
Roper, Belinda	July 13, 1882.
Roper, Mary A.	January 27, 1882.
Rose, John D.	February 9, 1884.
Rose, T. H.	June 20, 1868.
Ross, Janc	September 1, 1877.
Roundtree, Eva L.	April 8, 1889.
Rousseau, E.	May 21, 1869.
Rousseau, Mrs. L.	May 28, 1879.
Rowe, Mrs. A. A.	February 17, 1873.
Rowell, Edward P.	December 30, 1882.
Rowell, Mrs. Lizzie W.	September 20, 1889.
Rubell, Claude F.	June 13, 1881.
Ruddock, J. C.	May 5, 1877.
Ruggs, Earle L.	August 20, 1881.
Russell, Sadie E.	July 12, 1886.
Russell, Frank P.	December 16, 1882.
Russell, Mary C.	November 3, 1883.
Russell, George C.	September 20, 1889.
Rutherford, Mary A.	September 29, 1879.
Ryan, Amanda	May 5, 1877.
Ryder, J. Scott	December 31, 1887.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Sackett, Mary E.	July 12, 1886.
Salcido, Manuela G.	March 30, 1886.
Salisbury, Mary A.	January 29, 1876.
Sallee, Robert F.	September 10, 1886.
Sally, Mary	December 31, 1887.
Sample, Emma	July 16, 1883.
Sanborn, George N.	March 27, 1881.
Sanborn, Mrs. S. S.	March 28, 1878.
Sanborn, Allan P.	July 16, 1883.
Sanders, W. A.	May 21, 1869.
Sanford, Gerrard B.	February 9, 1884.
Sankey, Mrs. M. J.	January 5, 1875.
Sargent, William J.	July 13, 1882.
Sargent, Lizzie P.	January 23, 1885.
Sarvis, George C.	May 28, 1879.
Saunders, Wesley	December 26, 1879.
Savage, Myron H.	September 29, 1879.
Sax, H. A.	November 11, 1876.
Saxton, Mary L.	July 29, 1885.
Saxton, T. A.	May 5, 1877.
Sawyer, Frances C.	July 12, 1886.
Sawyer, Mary E.	April 8, 1889.
Schaeggs, Amy C. V.	December 26, 1879.
Schellhouse, E. J.	May 21, 1869.
Schrack, Blanche E.	November 22, 1884.
Scott, J. F.	September 29, 1879.
Scott, Samuel A.	December 30, 1882.
Scott, M. M.	May 28, 1879.
Scott, William H.	March 30, 1886.
Scott, Maggie K.	September 29, 1879.
Scott, Haney W.	January 27, 1882.
Scrivner, Rosa L.	December 23, 1886.
Scully, T. J. (duplicate).	July 12, 1886.
Seaman, Elbert A.	January 27, 1882.
Seaman, Edward M.	January 27, 1882.
Seavey, O. F.	December 26, 1879.
Seawell, J. A.	April 22, 1876.
Seeley, David T. (duplicate).	March 24, 1885.
Seeley, Ida	May 1, 1883.
Selling, Nathalie	September 30, 1885.
Selling, Eugenia	June 14, 1889.
Senger, Heinrich	December 26, 1879.
Sexton, Mrs. Ella M.	March 28, 1878.
Sexton, Caroline M.	September 20, 1889.
Seymour, Mrs. E. M.	December 26, 1879.
Shafer, A. C.	December 26, 1879.
Shannon, James H.	February 9, 1884.
Sharpe, Chauncey O.	September 19, 1882.
Shaw, Mattie J.	June 13, 1881.
Shaw, Lizzie	November 10, 1888.
Shaw, Annie J.	October 26, 1877.
Shaw, B. Angela	February 9, 1884.
Shaw, Sebastian	March 28, 1878.
Shaw, Theodore S.	March 13, 1879.
Shea, Mary T.	December 23, 1886.
Shearer, Mrs. C. O.	November 28, 1873.
Shearer, S. M.	January 29, 1876.
Shearer, John L.	September 19, 1882.
Shearer, Flora McD.	November 10, 1888.
Sheehan, Johanna C.	November 10, 1888.
Shepard, Lucy R.	July 13, 1882.
Shepherd, Kate	September 30, 1885.
Shckels, Mrs. M. E.	July 13, 1880.
Shelton, James R.	March 17, 1890.
Sherman, Liza	November 3, 1883.
Sherman, Fannie M.	June 1, 1875.
Sherwood, Electra M.	December 31, 1887.
Shipley, J. C.	November 28, 1873.
Shipley, Helen V.	August 20, 1881.
Shirley, Elizabeth	June 14, 1888.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Shorkley, Harriet B.	January 27, 1882.
Short, Miss Julia B.	June 1, 1875.
Shuck, L. M.	March 28, 1878.
Sibley, J. M.	December 27, 1867.
Sickall, Mark T.	March 13, 1879.
Sickler, William A.	November 10, 1888.
Silliman, Martha A.	March 28, 1878.
Silver, Mrs. Miriam	April 1, 1887.
Simon, Mrs. Frances	December 13, 1872.
Simon, Minna	December 10, 1884.
Simons, John A.	May 28, 1879.
Simonton, George W.	December 27, 1866.
Simpson, George W.	May 17, 1884.
Simpson, Henrietta C.	July 13, 1882.
Simpson, Clara R.	April 8, 1889.
Simpson, Ida L.	June 13, 1890.
Sinclair, Mary M.	January 23, 1885.
Sinex, T. H.	October 26, 1877.
Singley, Helen A.	July 16, 1883.
Sisson, Mrs. Caroline M.	October 26, 1877.
Sisson, William H.	June 14, 1888.
Skahaen, Hannah	May 4, 1888.
Skelton, Harvey C.	December 30, 1882.
Skidmore, Susie E.	December 30, 1882.
Slater, Miss Charlotte M.	May 28, 1879.
Slavan, Miss A. E.	June 3, 1872.
Slavan, Thomas H.	March 28, 1878.
Slaven, Thomas D. M. (duplicate)	December 27, 1888.
Sleeper, Mary	November 22, 1884.
Smeltzer, Manassas J.	November 10, 1888.
Smallfield, Alice	September 20, 1889.
Smiley, Helen M.	March 17, 1890.
Smith, Emma E.	November 10, 1888.
Smith, Miss Annie	May 27, 1868.
Smith, Ansel	May 5, 1877.
Smith, Annie E.	May 28, 1879.
Smith, Charles S.	January 29, 1876.
Smith, Miss Carrie L.	December 13, 1872.
Smith, Frank H.	March 13, 1879.
Smith, Grace	September 1, 1877.
Smith, Margaret K.	July 16, 1883.
Smith, Dee H.	November 3, 1883.
Smith, Mrs. George	July 23, 1878.
Smith, James D.	March 28, 1878.
Smith, John A.	July 29, 1885.
Smith, Mrs. Jennie	June 22, 1874.
Smith, Miss Jessie	June 3, 1872.
Smith, Cora V.	February 9, 1884.
Smith, Julia	May 28, 1879.
Smith, Emma C.	November 22, 1884.
Smith, James	July 23, 1878.
Smith, Miss Mary H.	September 29, 1879.
Smith, Nehemiah	July 25, 1878.
Smith, Virginia E.	January 23, 1885.
Smith, Stanley A.	March 13, 1879.
Smith, W. A. C.	June 19, 1868.
Smith, Eleanor M.	January 2, 1886.
Smith, A. A.	December 26, 1879.
Smith, Carrie L.	December 26, 1879.
Smith, L. D.	December 26, 1879.
Smith, Edward P.	January 2, 1886.
Smith, Mrs. Morris	December 26, 1879.
Smith, Zenas F.	September 24, 1878.
Smith, J. Walter	June 13, 1881.
Smith, Mary F.	August 20, 1881.
Smith, William L.	January 27, 1882.
Smith, Florence	December 31, 1887.
Smith, James L.	December 31, 1887.
Smith, Joseph	June 4, 1887.
Smith, Mary B.	December 23, 1886.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Smullin, S. N. D.	August 9, 1884.
Smyth, Clarence S.	November 10, 1888.
Smythe, E. Louise	September 20, 1889.
Snedaker, Eunice I.	July 12, 1886.
Snow, T. N.	November 11, 1876.
Snyder, Eli C.	November 10, 1888.
Sobey, Ellen	November 10, 1888.
Soberanes, Mrs. Lulu	December 13, 1889.
Sollinger, J. A.	November 24, 1875.
Solomon, Mary	September 17, 1881.
Soule, Miss M. L.	September 1, 1887.
Soule, Fannie L.	March 28, 1878.
Southeimer, J. J.	November 11, 1876.
Southworth, Mrs. E. A.	December 19, 1868.
Soward, Charles.	May 28, 1879.
Sowle, Mrs. Etta	March 17, 1890.
Spalsbury, Sara H.	September 19, 1882.
Spaulding, Addie A.	September 10, 1886.
Spaulding, Timothy A.	May 28, 1879.
Spaulding, Harriet A.	April 1, 1887.
Spedding, Kate D.	May 4, 1888.
Spencer, Rebecca	September 24, 1878.
Spooner, Alfred	July 23, 1878.
Sprague, Althea	May 1, 1883.
Sprague, Abbie F.	December 16, 1882.
Sprague, Caroline F. (duplicate)	December 16, 1882.
Spring, E. W.	July 23, 1878.
Spring, Mrs. Fannie	July 23, 1878.
Sprott, Maggie	December 16, 1882.
Spurrier, Charles A.	May 4, 1888.
Squares, U. E.	December 26, 1879.
Stackpole, Mary C.	July 13, 1882.
Stanfield, Annie	June 14, 1889.
Stanford, Belle M.	December 27, 1888.
Stallman, Nettie C.	December 27, 1888.
Stanley, Albert T.	July 16, 1883.
Starbird, Attie T.	November 10, 1888.
Starling, Jennie M.	March 13, 1879.
Standeford, Mrs. N. D.	June 1, 1875.
Stebbins, Minnie G.	June 13, 1890.
Stern, Augusta	June 14, 1889.
Sterns, Miss H. P.	March 28, 1887.
Steel, Thomas H.	January 5, 1875.
Steele, Mattie E.	December 10, 1884.
Stephens, John	July 29, 1885.
Stevens, Augusta	March 13, 1879.
Stevens, Harriet F.	August 20, 1881.
Stevens, Eliza A.	January 2, 1886.
Stevens, Lester	January 27, 1881.
Stevens, Ada	September 20, 1889.
Stevenson, Mrs. H. R.	October 26, 1877.
Stewart, Mrs. M. C.	December 26, 1879.
Stewart, Benjamin F.	July 16, 1883.
Stewart, Anna	April 1, 1882.
Stewart, Joseph H.	June 13, 1881.
Stewart, Jessie M.	May 4, 1888.
Stewart, Mrs. Minnie Belle	February 3, 1887.
Stickney, Simon F.	August 8, 1887.
Stier, Clara A. H.	February 3, 1887.
Stiles, Sabin A.	July 29, 1885.
Stiles, R. T.	December 26, 1879.
Stiltz, Clemence L.	December 13, 1889.
Stimson, Lizzie	November 10, 1888.
Stincen, Miss Alice M.	November 28, 1873.
Stincen, Ella E. C.	September 29, 1879.
Stinchfield, Mrs. Annie	March 17, 1890.
Stiner, Mrs. Jessie H.	September 29, 1879.
Stinson, Margaret N.	December 16, 1882.
Stinson, Sarah E.	November 6, 1880.
St. John, Hester A.	November 3, 1883.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Stockton, Lemuel D.	March 30, 1886.
Stohr, Miss Tillie C.	December 26, 1879.
Stone, Miss Ella J.	December 26, 1879.
Stone, Mrs. B. H.	November 28, 1873.
Stone, Nettie M.	November 22, 1884.
Stone, D. C.	December 26, 1866.
Stone, Marion P.	September 30, 1885.
Stone H. P.	March 14, 1871.
Stone, Miss Martha	May 5, 1877.
Stone, W. R.	March 13, 1879.
Stone, Hannah E.	July 13, 1882.
Stone, Helen M.	April 1, 1882.
Stone, Henrietta	July 13, 1882.
Stone, Mary G.	May 4, 1888.
Story, Lizzie	May 4, 1888.
Story, A. R.	September 29, 1879.
Stout, George H.	December 16, 1882.
Stout, Lizzie W.	November 10, 1888.
Stowell, E. M.	March 28, 1878.
Stowell, Mrs. Fannie A.	June 22, 1874.
Stowell, Miss P. M.	June 3, 1872.
Strang, Francis M.	March 17, 1890.
Strine, John H.	March 17, 1890.
Stratton, James	December 27, 1866.
Strauss, Esther L.	August 8, 1887.
Strauss, Ida R.	August 8, 1887.
Stuart, Franc E.	November 3, 1883.
Sturges, David B.	September 29, 1879.
Sturges, Seldon	May 28, 1879.
Sullivan, Nellie F.	December 31, 1887.
Sullivan, D. J.	May 28, 1879.
Sullivan, Nora G.	November 3, 1883.
Sullivan, Mrs. Theresa M.	March 13, 1879.
Sullivan, Ella	December 13, 1889.
Sullivan, Cornelius G.	June 13, 1890.
Summers, Eliza J.	November 22, 1884.
Summers, Susan H.	March 13, 1879.
Summerfield, Alice	July 29, 1885.
Summerville, Letitia	September 20, 1889.
Sumner, Henrietta	October 26, 1877.
Sumner, J. H.	November 28, 1873.
Sundquist, Josie M.	June 4, 1887.
Sutherland, Miss F. C.	March 13, 1879.
Sutphen, Albert W.	June 12, 1880.
Swan, Amanda	November 11, 1876.
Swain, O. E.	March 28, 1878.
Swanson, John T.	December 27, 1888.
Swasey, Alice	July 29, 1885.
Swasey, John A.	July 29, 1885.
Sweeney, Cassie L.	May 4, 1888.
Sweeney, Minnie	November 10, 1888.
Sweeney, Edward	September 29, 1879.
Swett, Mrs. Mary L.	December 27, 1866.
Swett, John	September 24, 1867.
Swift, Mary H.	September 10, 1886.
Swinney, Edwin	April 1, 1882.
Sykes, Jeannette N.	January 23, 1885.
Sykes, Frederick R.	June 13, 1890.
Taaffe, Lawrence	June 4, 1887.
Tabor, Benjamin P.	December 23, 1886.
Tabor, Mrs. Cora E.	September 20, 1889.
Taney, Lucy K.	December 23, 1886.
Tarbox, Charlotte W.	July 13, 1882.
Tatham, John	August 9, 1884.
Taylor, Robert	December 27, 1866.
Taylor, Robert S.	May 5, 1877.
Taylor, Agnes C.	March 13, 1879.
Taylor, William S.	May 28, 1879.
Teaford, Nannie W.	February 3, 1887.
Teel, Mary L.	March 17, 1890.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Templeton, Carrie A.	March 13, 1879.
Templeton, Miss L. S.	December 13, 1872.
Templeton, Louise.	September 29, 1879.
Templeton, M. L.	November 29, 1867.
Terry, Henry F.	November 22, 1884.
Thayer, Rose.	May 4, 1888.
Thom, Charles J.	September 19, 1882.
Thomas, Josiah W.	August 8, 1887.
Thomas, Mrs. B. F.	December 26, 1879.
Thomas, Flora M.	November 22, 1884.
Thompson, Etta L.	July 13, 1882.
Thompson, O. M.	December 26, 1879.
Thompson, Sarah E.	December 26, 1879.
Thompson, Miss Helen	June 3, 1872.
Thompson, Sadie R.	March 30, 1886.
Thompson, J. N.	November 11, 1876.
Thompson Helen M.	September 29, 1879.
Thompson, Louisa	May 5, 1877.
Thompson, Albert N.	August 8, 1887.
Thompson, Roberta A.	June 4, 1887.
Thompson, Jessica B.	December 27, 1888.
Thornton, Maggie E.	November 6, 1880.
Thorp, J. H.	March 13, 1879.
Thurber, A.	November 11, 1871.
Thurber, Mrs. J. V.	October 26, 1877.
Thurmond, G. E.	September 29, 1879.
Thurston, Maggie	February 9, 1884.
Thurston, Nettie	May 17, 1884.
Thurston, E. T.	May 21, 1869.
Thurton, Sarah E.	December 4, 1871.
Tichworth, J. C.	December 26, 1879.
Tiernan, Mrs. A. E.	September 24, 1878.
Tierney, Maggie A.	September 29, 1879.
Tiffany, Osbert A.	July 29, 1885.
Tiffany, A. J.	March 28, 1878.
Tillotson, H. J.	January 27, 1881.
Tilson, James R.	November 22, 1884.
Tilton, Etta M.	January 27, 1882.
Tildall, Lizzie H.	August 8, 1887.
Titus, Mary J.	March 13, 1879.
Tobin, Maggie	July 29, 1885.
Todd, Aurora H.	December 31, 1887.
Todd, H. J.	January 29, 1876.
Todd, Maggie	July 29, 1885.
Tompkins, Cora	December 30, 1882.
Tople, Prince L.	December 13, 1889.
Toothacher, Miss M. O.	March 28, 1878.
Torrey, L. Jennie	January 27, 1882.
Tower, Celia F.	July 29, 1885.
Towne, Hattie M.	November 22, 1884.
Townley, Emma	December 31, 1887.
Townsend, Mrs. Belle	August 20, 1881.
Towle, C. B.	April 22, 1876.
Traber, John W.	July 12, 1886.
Trafton, Dr. A.	November 11, 1871.
Trask, Stella G.	November 10, 1888.
Trask, Dummer K.	June 14, 1889.
Traynor, Mary E.	December 23, 1886.
Treat, Hannah H.	November 22, 1884.
Trout, D. H.	March 13, 1879.
Truc, C. F.	March 28, 1878.
Tryon, Mary E.	May 1, 1883.
Tucker, Mrs. E. R.	July 23, 1878.
Tully, Lizzie	December 13, 1889.
Tully, James	March 13, 1879.
Tunnell, Byron J.	December 16, 1882.
Turner, Henry F.	March 28, 1878.
Turner, Mrs. Alice M.	December 26, 1879.
Turner, Hanna Scott	July 13, 1882.
Turner, Emily J.	November 10, 1888.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Turner, William B.	June 14, 1889.
Tuttle, Mary E.	April 8, 1889.
Tuttle, Mrs. Mary E.	November 22, 1884.
Twining, Nathan C.	December 31, 1887.
Twitchell, Ida M.	July 29, 1885.
Twombly, B. F.	December 26, 1879.
Tyler, Eliza	July 16, 1883.
Tyrrell, Mary A.	January 27, 1882.
Tyus, Mary A.	November 6, 1880.
Udell, Frank	July 12, 1886.
Underwood, J. G.	July 23, 1878.
Underwood, George	September 10, 1886.
Upham, Isaac	May 21, 1869.
Upton, Mary F.	November 3, 1883.
Usinger, Conrad	September 19, 1882.
Valentine, Layton W. (duplicate)	July 12, 1886.
Vandever, Mary	August 8, 1887.
Van Dorn, V. J.	May 5, 1877.
Van Fossen, M. L.	December 26, 1879.
Van Guelder, Bertie	April 8, 1889.
Van Schaick, Mary A.	March 13, 1879.
Van Vlear, Mrs. Jennie M.	June 13, 1890.
Varcoe, George	March 17, 1890.
Varner, Laura A.	January 23, 1885.
Veeder, Mrs. Eliza P.	June 13, 1881.
Vestal, F. A.	May 5, 1877.
Vickers, Isora	January 27, 1881.
Vickers, Livingston Ed.	August 8, 1887.
Vincent, Mrs. M. E.	July 23, 1878.
Vinzent, Carrie A.	June 14, 1889.
Vivian, Calthea C.	March 17, 1890.
Vollmar, Bertha T.	April 8, 1889.
Voris, Elizabeth M.	November 6, 1880.
Vrooman, Charles M.	September 20, 1889.
Wade, Nettie	May 4, 1888.
Wade, Ada	January 2, 1886.
Wadleigh, Mary N.	December 26, 1879.
Walbridge, Jeannie	July 23, 1878.
Walden, Alice C.	July 12, 1886.
Waldron, Miss Helen R.	May 28, 1879.
Waldron, S. A.	September 25, 1879.
Walker, Clara M.	July 29, 1885.
Walker, E. H.	May 28, 1879.
Walker, Charles J.	July 12, 1886.
Walker, Cornelia	March 13, 1879.
Walker, C. M.	September 29, 1879.
Wallace, Alma	March 13, 1879.
Wallace, George W.	May 1, 1883.
Wallace, J. T.	September 29, 1879.
Wallace, W. B.	March 28, 1878.
Wallace, Frank S.	January 27, 1881.
Wallace, Emma	April 8, 1889.
Walsh, Mrs. Fannie L. (duplicate)	July 12, 1886.
Walsh, Katie	January 23, 1885.
Walsh, Miss Nellie E.	June 1, 1875.
Walsh, Ida C.	September 29, 1879.
Walter, Mrs. C. S.	September 24, 1878.
Walter, Cynthia C. N.	December 27, 1888.
Walter, Emlyn S.	August 20, 1881.
Walton, Mrs. Clara	August 20, 1881.
Walton, Miss A. E.	December 26, 1879.
Ward, Fannie	April 1, 1882.
Ward, Sampson L.	August 20, 1881.
Ward, Alice B.	December 23, 1886.
Ward, Thomas B.	December 23, 1886.
Ward, Florence	June 14, 1889.
Warnick, James W.	July 16, 1883.
Warren, E. N.	October 26, 1877.
Warren, R. B.	July 12, 1870.
Warren, Annie C.	February 9, 1884.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Warren, George Watters	February 3, 1887.
Wash, W. A.	March 13, 1879.
Washburn, Georgia	March 28, 1878.
Waterbury, Harriet E.	January 2, 1886.
Waterman, S. D.	November 11, 1871.
Waters, Mrs. C. K.	December 13, 1872.
Watson, B. J.	June 1, 1875.
Watson, Miss Lizzie J.	June 22, 1874.
Watson, Mrs. M. L.	June 23, 1878.
Watson, Miss Mary J.	June 3, 1872.
Watson, N. Flotilla	September 29, 1879.
Way, Mary A.	May 28, 1879.
Webb, Mary E.	December 26, 1879.
Webb, Holton	June 14, 1889.
Webb, Hayward	March 17, 1890.
Webb, Esther Belle	June 14, 1889.
Webb, Nellie L.	December 13, 1889.
Webber, Frederic E.	January 23, 1885.
Webster, Miriam	March 28, 1879.
Webster, Calvin B.	July 29, 1885.
Webster, Reginald H.	May 4, 1888.
Weed, Alice	March 30, 1886.
Weed, Ida B.	September 20, 1889.
Weeks, Mrs. J. M.	March 13, 1879.
Weeks, G. W.	September 29, 1879.
Weeks, Mattie C.	May 28, 1879.
Weeks, M. L.	May 5, 1877.
Weeks, Annie C.	December 26, 1879.
Weinmann, Louis	July 12, 1886.
Weir, Helen	May 5, 1877.
Weir, Sarah J.	December 15, 1868.
Wells, Alice M.	March 30, 1886.
Wells, James	July 12, 1886.
Wells, Maggie J.	July 16, 1883.
Wells, Addie H.	September 1, 1877.
Wells, Thomas N.	January 23, 1885.
Wells, J. C.	May 28, 1879.
Wells, Laura H.	March 14, 1871.
Wells, Laura H.	January 27, 1882.
Welsh, Eliza G.	January 23, 1885.
Welsh, Madge A.	November 10, 1888.
Welton, A. T.	December 26, 1879.
Wemple, E. L.	September 29, 1879.
Wermuth, Hamilton	March 14, 1871.
West, Laomer	November 3, 1883.
West, Georgia A.	March 17, 1890.
Westby, Miss L. M.	January 26, 1879.
Westfall, Martha W.	July 12, 1886.
Westfall, Mary J.	July 12, 1886.
Weston, Ada	March 28, 1878.
Weston, Augusta M.	August 9, 1884.
Wetmore, Octavia	June 13, 1881.
Wheaton, Clara	August 20, 1881.
Wheaton, Ann S.	March 13, 1879.
Wheeler, Alanson	July 23, 1878.
Wheeler, Mrs. J. D.	September 29, 1879.
Wheeler, Mary L.	April 1, 1882.
Wheelock, Dorcas	May 28, 1879.
Wheelock, Mrs. D. B.	November 28, 1873.
Whirlow, Hattie E.	November 22, 1884.
White, Clarence M.	December 26, 1879.
White, Miss Louisa E.	January 5, 1875.
White, Silas A.	November 11, 1871.
White, T. B.	December 13, 1872.
White, T. W.	March 28, 1878.
White, William	June 20, 1878.
White, Elizabeth	July 13, 1882.
White, Mary J.	January 27, 1881.
White, Jennie H.	June 14, 1888.
White, Richard	May 4, 1888.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
White, Sarah E.	December 23, 1886.
White, Mrs. Martha A.	September 20, 1889.
Whitehurst, Sarah F.	June 14, 1889.
Whitehurst, Thomas W.	March 28, 1878.
Whitesides, Jennie	July 12, 1886.
Whitmon, John H.	December 23, 1886.
Whittemore, Benjamin F.	March 17, 1883.
Wible, Anna A.	December 26, 1879.
Wickes, John T.	March 28, 1878.
Wideman, James	October 26, 1877.
Wilber, M. C.	March 13, 1879.
Wilber, Katie H.	July 13, 1882.
Wilbur, E. W.	March 28, 1878.
Wilcox, Nettie B.	November 10, 1888.
Wiley, Harley R.	July 29, 1885.
Wilkes, Laura	March 24, 1885.
Wilkins, Mrs. Kate M.	September 20, 1889.
Wilkinson, Joseph B.	July 29, 1885.
Willard, Robah C.	January 23, 1885.
Wiley, Oscar	June 13, 1881.
Williams, Hattie F.	January 27, 1881.
Williams, Mary E.	January 27, 1881.
Williams, Mercy C.	September 30, 1885.
Williams, Eugene A.	July 12, 1886.
Williams, W. J. G.	November 25, 1869.
Williams, Alexander M.	August 8, 1887.
Williams, David	September 20, 1889.
Williamson, Emelie	November 13, 1888.
Willis, Oscar J.	April 1, 1882.
Willis, William L.	November 6, 1880.
Wilson, Horace	December 26, 1879.
Wilson, W. R.	December 26, 1879.
Wilson, George W.	July 23, 1878.
Wilson, Mary E.	January 23, 1885.
Wilson, H. R.	March 14, 1871.
Wilson, H. C.	May 5, 1877.
Wilson, James K.	June 1, 1875.
Wilson, John L.	January 2, 1886.
Wilson, Eulalie A.	June 13, 1881.
Wilson, Emma A.	June 14, 1888.
Wilson, Tom M.	September 20, 1889.
Wilson, Washington	June 13, 1890.
Wing, Florence D.	December 31, 1887.
Winchester, Sarah A.	August 20, 1881.
Winchel, Fabius Maximus	March 17, 1890.
Winn, A. T.	May 5, 1877.
Winn, Charlotte C.	March 13, 1879.
Winston, Mrs. Lizzie M.	December 26, 1879.
Wise, Charles T.	August 9, 1884.
Wise, Mrs. H. A.	September 24, 1878.
Witherow, Samuel N.	January 23, 1886.
Witherow, John	December 26, 1879.
Withington, Augusta	July 23, 1878.
Witt, Thomas J.	July 16, 1883.
Wittenmyer, Clara K.	July 12, 1886.
Wixson, J. S.	March 15, 1879.
Wolfe, Alice M.	December 23, 1886.
Wood, C. T.	May 5, 1877.
Wood, Jesse	May 28, 1879.
Wood, Anna L.	July 29, 1885.
Wood, Mrs. N. A.	November 11, 1876.
Wood, Emerson	June 12, 1880.
Wood, Susie M.	November 6, 1880.
Wood, Miss Theo.	December 26, 1879.
Wood, E. Alfaretta	April 8, 1889.
Woodbury, W. W.	September 24, 1878.
Woodin, Mary P.	December 31, 1887.
Woodman, Charles A.	January 27, 1882.
Woodman, Margaret E. H.	March 13, 1879.
Woodman, Mrs. S. Marie	March 28, 1878.

LIFE DIPLOMAS—Continued.

NAMES.	When Issued.
Woods, Samuel S.	July 12, 1886.
Woods, Charles H.	May 1, 1883.
Woods, James L.	March 13, 1879.
Woods, Miss Bettie	March 13, 1879.
Woodruff, Miss Frances A.	July 12, 1870.
Woodward, Mrs. A. W.	December 4, 1875.
Woodward, Miss N. Z.	September 1, 1877.
Woodward, F. J.	December 26, 1879.
Woodworth, Mrs. Janette E.	June 1, 1875.
Wooll, Hattie L.	October 26, 1877.
Wooster, M. Helen	July 29, 1885.
Wooster, Carrie E.	June 13, 1890.
Worley, Florence N.	March 17, 1890.
Worth, Lettie M. G.	December 16, 1882.
Worthen, Mary J.	January 2, 1886.
Worthen, G. W.	July 13, 1880.
Worthing, Warren W.	December 31, 1887.
Wright, Ida E.	September 29, 1879.
Wright, Mamie S.	December 16, 1882.
Wright, Mrs. A. E.	January 29, 1876.
Wright, Emily V.	September 10, 1886.
Wright, Abby P.	March 26, 1878.
Wright, Mary L.	December 16, 1882.
Wright, Isaac	December 26, 1879.
Wright, John M.	November 6, 1880.
Wright, Martin V.	December 26, 1879.
Wright, Mrs. Sallie G.	September 17, 1881.
Wulff, Benjamin F.	July 29, 1885.
Wyllie, Alfred L.	September 30, 1885.
Wynne, Mary I.	June 4, 1887.
Wythe, Margaret	September 20, 1889.
Wynore, Mrs. Maria A.	March 17, 1890.
Yager, John G.	February 9, 1883.
Yager, Myron	May 28, 1879.
Yarnal, Bennett	March 28, 1878.
Yates, W. A.	June 22, 1874.
Yates, Lizzie	August 20, 1881.
Yorke, Jennie H.	July 29, 1885.
York, John, Jr.	July 23, 1878.
Young, Thomas L.	April 8, 1889.
Young, Frederic O.	July 16, 1883.
Young, Albert	September 24, 1878.
Young, W. H.	March 25, 1885.
Young, Belle	September 29, 1879.
Young, Nestor A.	September 29, 1879.
Young, John W.	March 30, 1886.
Young, Mrs. Mary A.	January 27, 1882.
Young, Rachel	August 8, 1887.
Youngman, Amanda M.	July 13, 1882.
Zimmerman, William	May 5, 1877.
Zumwalt, Virginia P. S.	April 1, 1882.

HOLDERS OF LIFE DIPLOMAS WHO HAVE DIED PREVIOUS TO JUNE 30, 1890.

NAMES.	When Issued.
Anderson, George P.	May 28, 1879.
Austin, Miss Minnie F.	December 27, 1866.
Badgley, O. E.	July 23, 1878.
Banks, Jerome	December 26, 1879.
Bateman, J. K.	May 28, 1879.
Beardsley, Lewis A.	July 29, 1885.
Benson, Annie E.	December 16, 1882.
Bonner, W. G.	September 1, 1887.
Bowling, Mattie	January 2, 1886.
Bradley, Theodore	December 27, 1876.
Brier, Kirk W.	March 28, 1878.

HOLDERS OF LIFE DIPLOMAS DECEASED—Continued.

NAMES.	When Issued.
Campbell, E. S.	March 13, 1879.
Carver, H. E.	December 26, 1879.
Casebolt, Miss M. A.	June 3, 1872.
Clarence, Henry	July 29, 1885.
Crothers, Miss M. I.	March 28, 1878.
Dodge, W. C.	June 22, 1874.
Egenhoff, William D.	November 22, 1884.
Elkins, Achia E.	March 28, 1878.
Fonda, Charles E.	May 5, 1877.
Gabriel, Mrs. C. E.	June 22, 1874.
Garrison, Gazena	January 29, 1876.
Gates, Milo H.	August 9, 1884.
Goin, J. W.	September 29, 1879.
Goodcell, Minnie A.	July 16, 1883.
Greer, Mary L.	August 20, 1881.
Hall, Mrs. Elizabeth	January 27, 1881.
Hickey, Kate M.	November 10, 1888.
Hill, Whitman H.	March 14, 1871.
Houghton, George E.	April 22, 1876.
Howell, S. S.	September 1, 1877.
Humphrey, E. D.	May 27, 1868.
Humphrey, Mrs. Mary	September 17, 1881.
Jamison, J. H. S.	December 26, 1879.
Kennedy, Kate	November 11, 1876.
Kerr, Naomi B.	August 20, 1881.
Landes, F. L.	November 11, 1876.
Lichtenthaler, Miss Mary	July 23, 1878.
Lindsay, Calvin	June 13, 1881.
Lowry, H. N.	December 26, 1879.
Mariner, R. K.	December 26, 1866.
McBrown, Alva	December 26, 1879.
McConnell, Harriet	September 29, 1879.
McDonald, W. P.	January 5, 1875.
Morgan, Mrs. L. A.	December 13, 1872.
Morris, George F.	September 24, 1867.
Neal, R. J.	September 29, 1879.
Norton, Henry B.	March 13, 1879.
Paulk, C. C.	May 28, 1879.
Peachy, F. A.	March 13, 1879.
Pearson, Dana C.	December 4, 1875.
Persing, Georgia	September 24, 1878.
Peterson, Peter P.	July 16, 1883.
Reed, L. W.	July 12, 1870.
Rowell, W. K.	December 27, 1877.
Smith, George	May 28, 1879.
Stowell, Miss M. E.	June 3, 1872.
Sullivan, Miss Kate	June 3, 1872.
Tait, George	December 27, 1866.
Taylor, Mary A.	September 30, 1885.
Temple, Miss Emma	November 28, 1873.
Thurston, Emma L.	May 4, 1888.
Wade, Margaret	April 26, 1876.
Wayman, John F.	August 9, 1884.
Wood, Mrs. E. A.	June 3, 1872.
Wozencraft, W. R.	May 28, 1879.

LIFE DIPLOMAS REVOKED.

NAMES.	When Issued.
Bragdon, H. H.	July 23, 1878.
Burch, Samuel N.	May 28, 1870.
Cowan, Marion F.	August 9, 1884.
Kennedy, Gano	December 26, 1879.
King, Charles A.	July 12, 1886.
Sabin, Isaac A.	April 8, 1889.
Watkins, Emory	January 5, 1875.

LIFE DIPLOMAS CANCELED.

NAME.	When Canceled.
Ross, Martha M.	January 2, 1886.

EDUCATIONAL DIPLOMAS.

NAMES.	Expires.
Aaron, Blanche M.	December 13, 1895.
Abbe, Frank B.	March 17, 1896.
Abrams, Dora L.	November 10, 1894.
Abrams, Rachel	June 4, 1893.
Abshire, Callie A.	June 14, 1894.
Adair, Joseph A.	August 9, 1890.
Adams, Henry C.	November 10, 1894.
Adams, Emma E.	March 17, 1896.
Adams, Mary A.	April 8, 1895.
Aldersen, Emma	June 14, 1894.
Aldrich, Lititia S.	December 31, 1893.
Aldrich, Lelia E.	March 30, 1891.
Allen, Mary E.	November 10, 1894.
Alexander, Rebecca	January 23, 1891.
Ames, Kate	September 20, 1895.
Anderson, Frank	July 29, 1891.
Anderson, Eugene B.	September 10, 1892.
Anderson, Helen	December 23, 1892.
Anderson, Julia	November 22, 1890.
Angier, Emma	March 30, 1891.
Anthony, Adam L.	August 8, 1893.
Angell, Naomi	January 23, 1891.
Angelo, Kittie	June 14, 1894.
Apperson, Carrie A.	December 31, 1893.
Apperson, Rosa	July 29, 1891.
Armstrong, Albert M.	March 24, 1891.
Armstrong, Joseph D.	March 17, 1896.
Arndt, Nina E.	December 31, 1893.
Arvidson, Anna M.	September 10, 1892.
Ashley, Pallas N.	June 13, 1896.
Asmus, Elise M.	July 12, 1892.
Atwater, Lizzie G.	February 3, 1893.
Atherton, Hattie E.	April 8, 1895.
Augustine, Martha	July 29, 1891.
Aubury, Mary E.	May 4, 1894.
Aull, Laura	November 10, 1894.
Aull, Clara E.	March 24, 1891.
Austin, John H.	August 9, 1890.
Ayer, Maud G.	September 20, 1895.
Badgley, Maretta E.	March 17, 1896.
Badgley, Emma	March 17, 1896.
Bailey, Amanda L.	April 8, 1895.
Baird, Edward E.	December 13, 1895.
Baird, Fred. G.	December 13, 1895.
Bainbridge, Jessie	September 20, 1895.
Bainbridge, Barry M.	September 20, 1895.
Baker, Arthur E.	November 10, 1894.
Baldwin, Maurice H. B.	February 3, 1893.
Ball, Mattie C.	January 23, 1891.
Balthis, Mary L.	December 23, 1892.
Bandy, Nellie L.	August 9, 1890.
Barker, Frankie	July 12, 1892.
Barker, Albert C.	September 20, 1895.
Barnes, Bessie P.	September 20, 1895.
Barnes, Margaret S.	January 2, 1892.
Barrett, Lizzie	August 9, 1890.
Barrows, Annie W.	January 2, 1892.
Barry, Thomas J.	May 4, 1894.
Barry, Norman J.	September 20, 1895.
Barry, Mary E.	June 14, 1895.
Barr, James A.	March 17, 1896.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Barnett, Carrie	December 13, 1895.
Barton, Rose V.	June 14, 1895.
Barton, Clara	September 20, 1895.
Bassett, Maria L.	June 14, 1894.
Bassham, Minnie C.	November 10, 1894.
Batchelder, Kate C.	February 3, 1893.
Bates, Clara	July 12, 1892.
Baugh, Arthur E.	June 14, 1895.
Beardsley, Emma F.	November 22, 1890.
Beattie, George W.	November 10, 1894.
Beauchamp, Delia	April 8, 1895.
Beckwith, Caroline	June 13, 1896.
Beckham, Lizzie L.	December 23, 1892.
Beggs, Ettie W.	September 10, 1892.
Behrens, Louise K.	November 10, 1894.
Belcher, Mary S.	January 22, 1891.
Benjamin, Harriet W.	April 1, 1893.
Benn, Mary E.	June 14, 1895.
Benoit, Joseph F.	April 8, 1895.
Bennett, Fannie	May 4, 1894.
Bennett, John B.	August 8, 1893.
Bennett, Nettie N.	January 2, 1892.
Bennett, Ida M.	January 2, 1892.
Benson, Susie L.	September 30, 1891.
Benson, Laura E.	May 4, 1894.
Berdine, Carrie	March 24, 1891.
Berger, Robert	August 9, 1890.
Berger, John B.	July 29, 1891.
Bergin, Eugenie M.	September 30, 1891.
Bergson, Emma L.	September 30, 1891.
Bettis, Laura H.	June 14, 1894.
Bibby, William R.	June 14, 1895.
Bingham, George K.	June 13, 1896.
Billingsley, Mattie A.	June 4, 1893.
Bissell, Cornelia H.	December 31, 1893.
Bither, Benj. J.	November 10, 1894.
Blair, Alice	August 8, 1893.
Blake, Margaret	July 29, 1891.
Bland, H. Meade	September 20, 1895.
Bledsoe, Sallie A.	August 9, 1890.
Bledsoe, Sophia	December 23, 1892.
Bliss, Mary A.	September 30, 1891.
Blivin, Fannie M.	September 30, 1891.
Blodgett, Ida L.	September 30, 1891.
Blue, Lillie	April 1, 1893.
Blumb, Lena F.	December 31, 1893.
Blumb, Amelia C.	July 29, 1891.
Boettcher, Polly	August 8, 1893.
Boggs, Jefferson D.	July 12, 1892.
Booth, Phebe A.	July 12, 1892.
Boman, Paul	September 20, 1895.
Boulware, Alice S.	November 22, 1890.
Boukofsky, Rebecca M.	September 20, 1895.
Bowler, Ella	September 20, 1895.
Bowers, Lillian	March 24, 1891.
Boyd, Amelia T.	June 14, 1894.
Braden, Helen	December 31, 1893.
Bradley, Mollie	June 4, 1893.
Brazelle, Anna	June 14, 1894.
Breckenfield, Meta C.	January 23, 1891.
Brett, Mabel E.	December 23, 1892.
Brier, Kittie E.	March 17, 1896.
Brincard, Katie A.	July 12, 1892.
Brink, Eulalia A.	November 10, 1894.
Bristol, Maud K.	November 10, 1894.
Brockett, Charles E.	December 13, 1895.
Brogan, Kate E.	January 23, 1891.
Bronson, Fannie	July 29, 1891.
Brooks, Lillie B.	August 8, 1893.
Brooks, Marie E.	March 24, 1891.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Bromly, Kate T.	November 10, 1894.
Brown, Carrie P.	December 23, 1892.
Brown, Esther.	August 8, 1893.
Brown, Minnie.	December 31, 1893.
Brown, Mary L.	April 1, 1893.
Brown, Ada F.	November 10, 1894.
Brown, Harry O.	September 10, 1892.
Brown, Frances A.	July 12, 1892.
Brown, Floribel.	July 29, 1891.
Brown, Bella C.	July 29, 1891.
Brown, Cora.	June 13, 1896.
Brown, Mary.	March 17, 1896.
Brown, Nellie M. B.	September 20, 1895.
Brown, Georgia.	September 20, 1895.
Brown, Kate.	June 14, 1895.
Bruch, Louisa E.	March 17, 1896.
Brud, Helen E.	December 23, 1892.
Brunhouse, Mary C.	November 10, 1894.
Bryant, Paul.	January 2, 1892.
Bryant, Arthur W.	September 30, 1891.
Bryson, Jennie E.	November 10, 1894.
Buckley, Helen F.	November 10, 1894.
Buckley, Anson E.	September 20, 1895.
Buckelew, Minnie E.	August 9, 1890.
Bull, Henry R.	January 2, 1892.
Bunnell, Alice.	March 24, 1891.
Burbank, Helen A.	November 10, 1894.
Burnett, Alson G.	April 8, 1895.
Burnett, Anna D.	July 12, 1892.
Burnham, Lucetia.	December 31, 1893.
Burr, Henry A.	April 1, 1893.
Burr, Isabel D.	April 8, 1895.
Burrell, Fred. C.	April 1, 1893.
Burns, Robert F.	January 2, 1892.
Burton, Millie C.	September 20, 1895.
Burt, Augusta E.	September 30, 1891.
Bush, Lizzie R.	May 4, 1894.
Butean, Samuel H.	December 31, 1893.
Buterbaugh, Daniel S.	December 31, 1893.
Butterfield, Norah H.	December 31, 1893.
Byron, Teresa.	June 13, 1896.
Byrne, Julia.	April 8, 1895.
Calhoun, Virginia.	September 20, 1895.
Caldwell, Charles J.	January 2, 1892.
Cady, Mary C.	January 23, 1891.
Cahalin, Gertrude H.	September 10, 1892.
Caminetti, Ella E.	February 3, 1893.
Campbell, William H.	March 30, 1892.
Campbell, Charles W.	November 22, 1890.
Campbell, Nettie L.	March 17, 1896.
Campbell, Florella.	September 20, 1895.
Candee, Kate H.	December 31, 1893.
Carey, Elmer.	July 29, 1891.
Carlin, William H.	August 9, 1890.
Carly, Emma.	August 9, 1890.
Carmichael, Albert.	August 8, 1893.
Carpenter, Will R.	November 10, 1894.
Carpenter, Ida M.	December 23, 1892.
Carpenter, Jennie M.	June 14, 1895.
Carpenter, Mary E.	June 14, 1895.
Carlyon, James.	April 8, 1895.
Carothers, Ella.	June 13, 1896.
Carroll, Laura.	March 30, 1892.
Carson, Elizabeth.	May 4, 1894.
Cartmell, William C.	July 29, 1891.
Cartwright, George W.	September 20, 1895.
Carville, Henrietta E.	December 27, 1894.
Carver, Lucinda J.	January 2, 1892.
Case, Charles H.	November 22, 1890.
Casey, Mary E.	July 29, 1891.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Caughey, Frank L.	May 4, 1894.
Chambaud, Sarah	March 17, 1896.
Chambaud, Angelina	September 10, 1892.
Chamberlain, Mattie L.	July 12, 1892.
Chambers, George H.	August 8, 1893.
Chapman, Florence A.	January 2, 1892.
Chapman, Mary L.	August 9, 1890.
Chapman, Hervey W.	April 1, 1893.
Chapman, Jessie	June 13, 1896.
Chase, Ella B.	April 8, 1895.
Chance, Lulu M.	March 17, 1896.
Chandler, Willard R.	April 8, 1896.
Chew, Mary F.	November 10, 1894.
Child, Emma R.	November 10, 1894.
Church, Emma F.	April 8, 1895.
Clark, Alice J.	March 24, 1891.
Clark, David C.	September 30, 1891.
Clark, Charlotte K.	November 22, 1890.
Clark, Ida E.	November 10, 1894.
Clarke, Kate F.	December 31, 1893.
Clark, Cora L.	April 8, 1895.
Claypool, Mary F.	July 29, 1891.
Claypool, Carrie	September 10, 1892.
Clayes, Lola B.	April 8, 1895.
Clayton, Mrs. Kate	December 13, 1895.
Clayton, Ida M.	June 13, 1896.
Cleland, Mary L.	April 8, 1895.
Clement, Clara	November 10, 1894.
Clements, Chas. C.	May 4, 1894.
Cline, Annie	November 10, 1894.
Clothier, Edith L.	November 10, 1894.
Coady, Ida A.	December 31, 1893.
Cochrane, Annie	June 13, 1896.
Coffey, Alexander B.	August 9, 1890.
Coffman, James T.	January 23, 1891.
Colbert, Peter E.	November 22, 1890.
Colby, Alice E.	July 12, 1892.
Colehan, Eliza A.	August 8, 1893.
Colehan, Mary J.	May 4, 1894.
Coleman, Elvira	March 17, 1896.
Collins, Bertha I.	August 8, 1893.
Colton, Lena	July 12, 1892.
Coltrine, Hugh	December 31, 1893.
Conger, Florence	July 12, 1892.
Conn, Isabella	August 8, 1893.
Conant, Agnes P.	September 20, 1895.
Connell, William J.	March 17, 1896.
Connor, George S.	April 8, 1895.
Connors, Margaret E.	August 9, 1890.
Cook, Mary	December 31, 1893.
Coombs, S. Leslie	March 17, 1896.
Combs, M. Sue	March 17, 1896.
Cooper, Ina	September 30, 1891.
Copeland, Lawrence	November 10, 1894.
Copsey, Reese	May 17, 1894.
Corcoran, Alice C.	May 4, 1894.
Cory, Ben. Brodie	November 10, 1894.
Corrigall, John W.	May 5, 1894.
Cortilyon, Lizzie A.	November 22, 1890.
Cottrell, Emma	February 3, 1893.
Cove, Emily A.	July 12, 1892.
Covington, Flora	March 30, 1892.
Cowie, Charlotte	November 10, 1894.
Cowley, Florence A.	November 22, 1890.
Cox, Herbert E.	August 8, 1893.
Cozzens, Jerusha A.	January 2, 1892.
Crane, Willimena W.	January 23, 1891.
Crane, Martha	July 12, 1892.
Crane, Thos. J.	March 17, 1896.
Craig, Elizabeth	December 23, 1892.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Cranmer, William S.	July 12, 1892.
Crawford, Crockett M.	November 10, 1894.
Crawford, Addie S.	March 17, 1896.
Creed, Walter M.	November 10, 1894.
Creighton, Ella	April 1, 1893.
Crocker, Mollie L.	December 31, 1893.
Crofton, Emma C.	November 22, 1890.
Crofts, Francis E.	December 27, 1894.
Cross, Lillian A.	September 20, 1895.
Cronemiller, Mattie J.	December 27, 1894.
Cronemiller, Mary M.	August 9, 1890.
Crowley, Lizzie E.	March 30, 1892.
Cruikshank, Mrs. Eugenie	December 13, 1895.
Crump, Nadine	April 8, 1895.
Crum, Alice M.	August 8, 1893.
Cullen, Louise A.	November 10, 1894.
Cullen, Jennie	April 8, 1895.
Cullen, Lulu R.	June 14, 1895.
Cullinan, Lizzie W.	July 12, 1892.
Curran, Abbie H.	December 31, 1893.
Curran, Henry J.	December 31, 1893.
Curry, Margaret B.	December 31, 1893.
Curtis, Corinna M.	December 13, 1895.
Curtis, Nellie E.	December 31, 1893.
Curtis, Nellie F.	February 3, 1893.
Curtis, Joanna F.	November 22, 1890.
Cushing, Edward A.	January 23, 1891.
Cushman, William E.	April 8, 1895.
Daly, Clara	August 8, 1893.
Daly, Ellen	June 4, 1893.
Dalzell, Anna M.	November 10, 1894.
Daniels, Celia	March 17, 1896.
Danielwitz, Charlotte E.	July 12, 1892.
Darling, Annie	September 20, 1895.
Davidson, Amy	August 8, 1893.
Davis, Simeon A.	March 24, 1891.
Davis, Dora	December 31, 1893.
Davis, Fannie St. G.	August 8, 1893.
Davis, Nellie S.	February 3, 1892.
Davis, Sarah A.	May 4, 1894.
Day, Mariana	December 13, 1895.
Deacon, Ada L.	June 13, 1896.
Debnam, Emma	March 17, 1896.
De Brish, Louis	August 9, 1890.
Demuth, Eva L.	November 10, 1894.
Deuel, Annie	April 8, 1895.
Derrick, Alice L.	June 14, 1895.
Derry, Annie E.	June 14, 1894.
Desmond, Maggie	August 9, 1890.
Devine, Winifred G.	March 17, 1896.
Devol, Lillian	August 8, 1893.
De Wolfe, Flora I.	April 8, 1895.
De Zaldo, Mary E.	July 12, 1892.
Diehl, Clara M.	September 20, 1895.
Dihel, Elizabeth	April 8, 1895.
Dickerson, William O.	September 30, 1891.
Dickey, Sabina F.	November 22, 1890.
Dickson, Mary L.	November 22, 1890.
Dinwiddie, Nellie	December 23, 1892.
Dippel, Alice E.	June 13, 1896.
Dippel, Philip	December 27, 1894.
Disbrow, Henrietta E.	February 3, 1892.
Dixon, Anna E.	May 4, 1894.
Doan, Agnes C.	July 12, 1892.
Doan, Hattie A.	June 13, 1896.
Dodge, Inez B.	December 13, 1895.
Dodge, William E.	March 30, 1892.
Dodson, Alice M.	August 9, 1890.
Dodson, Nellie M.	December 27, 1894.
Doheny, Louise J.	August 9, 1890.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Doherty, Emma	June 4, 1893.
Doherty, Emma L.	November 10, 1894.
Doherty, Kate	December 23, 1892.
Dolman, Annie L.	December 31, 1893.
Donnelly, Ida J.	February 3, 1892.
Donnelly, Sara F.	November 10, 1894.
Donovan, Laura	April 8, 1895.
Doran, Alice R.	July 29, 1891.
Dorsey, Florence E.	May 4, 1894.
Douglas, Green L.	July 29, 1891.
Dower, Mary	December 31, 1893.
Downey, Thomas	April 8, 1895.
Downing, Ida L.	June 13, 1896.
Downing, Andrew E.	November 10, 1894.
Downs, Blanche L.	August 9, 1890.
Dows, Josephine	November 10, 1894.
Doyal, Wilbur	July 29, 1891.
Doyle, Jennie E.	July 12, 1892.
Doyle, Jennie E.	June 14, 1894.
Doyle, Otis M.	September 20, 1895.
Doyle, Mary T.	December 13, 1895.
Drake, Carrie L.	November 10, 1894.
Drappo, Virginia E.	January 23, 1891.
Dudley, Annie E.	May 4, 1894.
Duffy, Alicia A.	December 13, 1895.
Duncan, Luella	July 29, 1891.
Duncan, Clara L.	December 31, 1893.
Duncan, Belle	September 30, 1891.
Duncan, Lillie	March 17, 1896.
Dunlap, Lizzie A.	September 20, 1895.
Dunn, Susie M.	April 8, 1895.
Dunn, Hettie A.	December 31, 1893.
Dunstone, Selina	May 4, 1894.
Durkin, Lulu F.	December 31, 1893.
Durner, Tillie	September 20, 1895.
Duval, Annie T.	May 4, 1894.
Dwyer, Anna M.	November 22, 1890.
Easton, Celesta	September 20, 1895.
Easton, Elizabeth	July 29, 1891.
Ecker, Mrs. Alberta M.	March 17, 1896.
Eckhart, Amanda	June 14, 1895.
Ede, Alice L.	June 14, 1895.
Eddy, Andrew W.	July 16, 1890.
Eddy, Evelyn C.	January 2, 1892.
Edgerton, Charles L.	February 3, 1893.
Edmonson, Emma F.	August 8, 1893.
Edwards, Lizzie	April 8, 1895.
Edwards, Della R.	December 31, 1893.
Effey, Agnes	August 8, 1893.
Egan, Josephine	April 8, 1895.
Egenhoff, Mary L.	December 23, 1892.
Egl, Helene	July 12, 1892.
Eilers, Pauline	December 23, 1892.
Elder, Ida E.	April 8, 1895.
Eliot, Helen A.	May 4, 1894.
Elliott, Charles T.	September 10, 1892.
Elliott, Mary	November 22, 1890.
Elliott, Mamie E.	July 12, 1892.
Ellis, Coe E.	November 22, 1890.
Ellis, Minora S.	December 31, 1893.
Ellison, Sarah G.	December 31, 1893.
Emery, Nellie F.	March 17, 1896.
Englebright, Minnie	March 24, 1891.
Enlow, Ephraim E.	May 4, 1894.
Entwistle, Alice J.	November 10, 1894.
Ephraim, Adeline	December 13, 1895.
Estinghausen, Phileta	September 20, 1895.
Evans, Alice E.	September 20, 1895.
Evans, John T.	June 4, 1893.
Evans, William J.	January 23, 1891.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Evans, Cicero P.	July 29, 1891.
Everett, Alice	December 23, 1892.
Everett, Grace E.	May 4, 1894.
Exley, Sarah E.	August 9, 1890.
Fahey, Maggie A.	June 13, 1896.
Fairchild, Carrie S.	July 29, 1891.
Fairfield, Sadie F.	November 10, 1894.
Farley, Cornelia	September 30, 1891.
Farley, Lizzie S.	August 8, 1893.
Farley, Rose E.	August 8, 1893.
Farmer, Lou	September 20, 1895.
Farrell, Maggie R.	February 3, 1893.
Farrell, Mary F.	November 10, 1894.
Faulding, Anna C.	May 4, 1894.
Fay, Rose	December 23, 1892.
Fay, Alvin	January 2, 1892.
Fay, Julia F.	June 14, 1895.
Fay, Mrs. Nannie E.	June 13, 1896.
Feeny, Ella	September 30, 1891.
Fennell, Marguerite A.	June 4, 1893.
Finch, Sabra A.	June 4, 1893.
Finnie, Belle	August 9, 1890.
Fischer, Jennie	January 28, 1891.
Fisher, Charles M.	July 29, 1891.
Fisher, Ella P.	November 22, 1890.
Fisher, Alice	July 12, 1892.
Fitzgerald, Richard J.	August 8, 1893.
Fitzpatrick, Jessie D.	March 17, 1896.
Fitzsimmons, Mary S.	June 14, 1895.
Flaherty, Belle	June 4, 1893.
Flemming, Sarah W.	June 14, 1895.
Fletcher, Nellie P.	December 23, 1892.
Floden, Karl	July 12, 1892.
Fogg, Alida M.	August 8, 1893.
Folsom, Hiram	July 29, 1891.
Ford, Howard	January 2, 1892.
Ford, Plin	September 30, 1891.
Ford, Ellen M.	September 30, 1891.
Ford, Walter J.	December 13, 1895.
Forward, Ella J.	June 14, 1895.
Foss, Carrie S.	December 13, 1895.
Fountain, Maggie L.	November 10, 1894.
Fowler, Bell	July 29, 1891.
Fox, Sarah	November 10, 1894.
Foy, Ella	July 12, 1892.
Franks, Esther	January 2, 1892.
Franklin, Fannie M.	December 27, 1894.
Frater, Abbie M.	July 29, 1891.
Frazee, Hattie M.	September 30, 1891.
Freeman, Callie	August 9, 1890.
Freeman, Frances	August 9, 1890.
Freeman, Clarkson P.	June 4, 1893.
Frederick, Aaron W.	September 20, 1895.
Fuller, Eugenie	December 31, 1893.
Fuller, Flora M.	November 10, 1894.
Furlong, Anna M.	September 10, 1892.
Gabriel, Mrs. Annie J.	March 17, 1896.
Gaddis, Mary	November 22, 1890.
Gale, Ella	December 23, 1892.
Gall, Mary M.	May 4, 1894.
Gallagher, Ettie M.	May 4, 1894.
Gallagher, Cora	July 29, 1891.
Gallagher, Nellie R.	April 8, 1895.
Gallagher, Mary S.	December 13, 1895.
Gallagher, Annie M.	December 27, 1894.
Gallimore, Frances	December 23, 1892.
Galloway, Martha S.	February 3, 1893.
Galloway, Allen R.	January 2, 1892.
Gardner, Elmer E.	November 10, 1894.
Garlick, Etha F.	December 23, 1892.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Garrison, Spencer C.	August 8, 1893.
Garrison, Albert G.	December 3, 1894.
Garner, John	June 14, 1895.
Garness, Emma F.	September 20, 1895.
Garvin, Sadie	May 4, 1894.
Gassaway, Arthur D.	March 30, 1892.
Gay, Adella	January 23, 1891.
Gay, Walter L.	September 20, 1895.
Geis, Mrs. Sarah E.	March 17, 1896.
Geary, Ella B.	September 20, 1895.
Getchell, Nettie	September 10, 1892.
Gilbert, Kate	April 8, 1895.
Gilechrist, Sophia J.	November 10, 1894.
Giles, May F.	September 10, 1892.
Gill, John J.	November 10, 1894.
Gill, Maggie A.	April 8, 1895.
Gillis, Icie M.	March 30, 1892.
Gilliam, Delia	December 23, 1892.
Gillmore, Eva	December 23, 1892.
Gilmore, Susie M.	January 2, 1892.
Gilmartin, Julia F.	November 22, 1890.
Gilmer, Kate	November 22, 1890.
Given, Horace R.	January 23, 1891.
Glenn, Alvar C.	June 13, 1896.
Glover, Arthur W. (duplicate).	March 30, 1892.
Goldman, Julia E.	January 23, 1891.
Goldsmith, Ada	November 22, 1890.
Gooch, Emma A.	July 29, 1891.
Good, Rachel	February 3, 1893.
Gordon, Mary Q.	September 10, 1892.
Gosbey, Perley F.	January 2, 1892.
Gould, Melissa F.	July 12, 1892.
Gove, Lilla B.	August 9, 1890.
Gower, Hattie F.	April 8, 1895.
Græbe, Mattie J.	September 30, 1891.
Graffelman, Lucinda	December 23, 1892.
Graham, Minnie E.	March 17, 1896.
Grant, Emily	November 10, 1894.
Graves, Sadie H.	November 10, 1894.
Gray, Carrie	March 24, 1891.
Gray, Bessie S.	July 12, 1892.
Gray, William C.	April 8, 1895.
Green, Floride	June 13, 1896.
Green, Annie E.	December 31, 1893.
Green, Mary B.	December 31, 1893.
Greenlaw, Flora M.	July 12, 1892.
Greenman, Ella E.	December 31, 1893.
Greenwell, Virginia I.	December 31, 1893.
Gregory, Jessie B.	August 8, 1893.
Greer, Lizzie B.	June 13, 1896.
Griffin, Lizzie M.	September 20, 1895.
Griffin, Ellen	December 31, 1893.
Griffith, John M.	November 22, 1890.
Griffiths, H. Mary	September 20, 1895.
Grimm, Adele L.	January 2, 1892.
Grinstead, J. Russell	March 30, 1892.
Grover, Minnie E.	May 4, 1894.
Grubbs, Clara M.	September 20, 1895.
Grunig, Louis H.	November 10, 1894.
Grunsky, Mattie K.	June 14, 1894.
Gullick, Charles F.	May 4, 1894.
Guthrie, Finis W.	August 9, 1890.
Hager, Hattie J.	March 24, 1891.
Hagerty, Annie M.	August 9, 1890.
Haile, J. Henry	December 31, 1893.
Hails, Abbie J.	May 4, 1894.
Hahmann, Lottie C.	January 2, 1892.
Hall, George W.	November 10, 1894.
Hall, Frances M.	September 30, 1893.
Hall, Ida S.	December 31, 1893.
	June 4, 1893.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Hall, Ida L.	May 4, 1894.
Hall, M. Ella	December 23, 1892.
Hall, William S.	February 3, 1893.
Hamilton, Charles C.	March 30, 1892.
Hamilton, Florence N.	January 2, 1892.
Hamilton, Robert J.	March 30, 1892.
Hamilton, Arthur L.	September 20, 1895.
Hammond, Etta E.	May 4, 1894.
Hampton, Crittenden	December 23, 1892.
Hampton, Lizzie M.	December 31, 1893.
Handy, Savanna	September 10, 1892.
Hanton, Amelia J.	July 12, 1892.
Hansecom, St. L.	August 8, 1893.
Hansecom, Mary W.	June 14, 1895.
Hanson, Mary M.	March 17, 1896.
Hansen, John H.	December 23, 1892.
Harby, Rosalie	November 22, 1890.
Harper, Sarah E.	June 13, 1896.
Harper, Jeanette	December 27, 1896.
Harrell, Alfred	December 27, 1894.
Harrier, Louis G.	January 23, 1891.
Harrigan, Josephine	December 31, 1893.
Harrigan, Lizzie B.	November 10, 1894.
Harrington, Julia	December 23, 1892.
Harrington, Agnes	June 14, 1895.
Harris, Marian H.	May 4, 1894.
Harry, Charles R.	December 31, 1893.
Harrow, Gertrude D.	July 29, 1891.
Hart, Joseph C. B.	July 29, 1891.
Hasty, Eva	August 8, 1893.
Hathaway, Emma S.	July 12, 1892.
Haun, Mary F.	July 29, 1891.
Hausch, Anna B.	August 8, 1893.
Hayburn, Marguerita E.	January 2, 1892.
Hayden, Carrie M.	December 23, 1892.
Haydon, Sarah F.	November 22, 1890.
Haynes, Daniel P.	September 20, 1895.
Hays, Florence	September 20, 1895.
Hazen, Ella M.	September 30, 1891.
Heacock, Carrie L.	June 4, 1893.
Head, Charles M.	May 4, 1894.
Heald, Etta E.	June 14, 1894.
Heath, Virginia D.	January 2, 1892.
Heaton, Hattie B.	June 14, 1894.
Heaton, Jessie A.	March 17, 1896.
Heard, Lucy	March 17, 1896.
Hedernan, Thomas H.	June 14, 1894.
Henicke, Emma M.	November 10, 1894.
Hendon, Lillian	July 12, 1892.
Hennessey, John E.	August 9, 1890.
Hennessey, James S.	May 4, 1894.
Henrich, Karl	December 31, 1893.
Heaney, Mary Ella	March 17, 1896.
Henry, Kate	November 10, 1894.
Henry, Margaret R.	July 12, 1892.
Henry, Nellie	September 10, 1892.
Herman, Ida B.	September 20, 1895.
Herd, Lillie M.	March 17, 1896.
Hertz, Regina	April 8, 1895.
Herren, William, Jr.	January 23, 1891.
Herrington, Rachel H.	November 10, 1894.
Hersum, Henrietta	November 10, 1894.
Hershiser, William A.	July 12, 1892.
Hession, Kate E.	November 22, 1890.
Hester, Ida M.	January 23, 1891.
Higgins, Annie	January 23, 1891.
Hilke, Louise J.	August 8, 1893.
Hill, Mary E.	December 27, 1894.
Hillman, Jennie C.	November 22, 1890.
Hinckley, Kate G.	December 31, 1893.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Hinkson, Lucy J.	December 13, 1895.
Hitchcock, Belle	August 8, 1893.
Hitchcock, Helen M.	November 22, 1890.
Hixon, Isadore	April 8, 1895.
Hetzel, Lenah	March 30, 1892.
Hobe, Sophia A.	November 22, 1890.
Hodson, Casper W.	June 13, 1896.
Hodgson, Joe E.	December 23, 1892.
Hodghead, Beverly L.	September 20, 1895.
Hogshead, Clara E.	September 20, 1895.
Hoit, Fannie	September 10, 1892.
Hoitt, Clara	February 5, 1893.
Holbrook, Eva	July 12, 1892.
Holland, Emma	November 22, 1890.
Hollopeter, Elmer E.	August 9, 1890.
Holmes, Emma D.	January 2, 1892.
Holton, Edee P.	July 12, 1892.
Holyer, Sidney Ella	April 1, 1893.
Hook, Mary E.	May 4, 1894.
Hook, Hattie C.	March 17, 1896.
Hooper, Frank W.	August 8, 1893.
Hoppe, Clara A.	November 10, 1894.
Hopps, May E.	November 10, 1894.
Hopkins, Minnie W.	September 20, 1895.
Hornback, Julia	December 23, 1892.
Horrigan, Sarah M.	May 4, 1894.
Hornsby, Annie L.	April 8, 1895.
Horton, Marie	December 13, 1895.
Hosmer, Phebe L.	November 10, 1894.
Houchins, Edward A.	January 23, 1891.
Houston, Jennie	December 31, 1893.
Howard, F. Jennie	July 12, 1892.
Howell, Minnie W.	December 31, 1893.
Howland, George D.	November 10, 1894.
Huber, Blanche	November 10, 1894.
Huffaker, Anthony	April 1, 1893.
Hughes, Ida E.	April 1, 1893.
Hughes, Emma A.	July 12, 1892.
Hughes, Robert E.	March 17, 1896.
Humphrey, Alice L.	January 2, 1892.
Humphrey, Thomas W.	May 4, 1894.
Hunt, Ida L.	November 22, 1890.
Hunt, Thomas H.	March 17, 1896.
Hunt, Bertha R.	June 13, 1896.
Hunter, Edgar	August 8, 1893.
Hunter, Hattie	February 3, 1893.
Hurd, Hetty	January 23, 1891.
Hurley, Mary E.	August 8, 1893.
Ingalls, Mrs. Ethel Stone	September 20, 1895.
Ingalls, Amelia A.	March 24, 1891.
Ingram, George	January 23, 1891.
Ingram, Henry Clay	August 8, 1893.
Irons, Charles E.	June 14, 1895.
Ives, Cassie L.	November 10, 1894.
Jackson, Etta H.	April 8, 1895.
Jameson, Jennie	January 2, 1892.
Jamison, Mary E.	August 8, 1893.
Jamison, Eugenia	November 10, 1894.
Jared, Mary C.	August 9, 1890.
Jenkins, Mary A.	July 29, 1891.
Jenne, Mary E.	December 31, 1892.
Jensen, Emma M.	September 20, 1895.
Jepson, Mary E.	June 14, 1893.
Johnson, Annie M. (City of Oakland)	May 4, 1894.
Johnson, Annie M. (Sacramento County)	May 4, 1894.
Johnson, Katie E.	July 12, 1892.
Johnson, Minnie G.	January 23, 1891.
Johnson, Helen M.	January 2, 1892.
Johnson, Wells B.	July 12, 1892.
Johnson, Lottie J.	September 20, 1895.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Johnston, Petra	March 17, 1896.
Johnston, Fannie E.	June 13, 1896.
Johnston, Mollie B.	December 9, 1890.
Jones, Ella M.	December 23, 1892.
Jones, Josie F.	December 31, 1893.
Jones, Lillia R.	December 31, 1893.
Jones, Laura G.	November 10, 1894.
Jones, Mary	December 31, 1893.
Jones, Mary L.	November 10, 1894.
Jones, Charles E.	June 13, 1896.
Juergens, Annie R.	August 8, 1893.
Kane, Mary A.	August 9, 1890.
Kane, Emma G.	April 8, 1895.
Kaplan, Maria E.	November 22, 1890.
Karatar, Angele C.	November 10, 1894.
Karz, Anna B.	December 23, 1892.
Keady, Maggie T.	September 20, 1895.
Kean, Kathleen E.	December 13, 1895.
Keating, Hattie M.	September 20, 1895.
Keating, Mary E.	December 31, 1893.
Keefe, Anna	May 4, 1894.
Keep, Hattie R.	December 31, 1893.
Keith, Fannie	August 8, 1893.
Kelley, Ella	July 12, 1892.
Kelly, Honnie H.	June 14, 1895.
Kellogg, Charles M.	September 30, 1891.
Kendall, Flora C.	May 4, 1894.
Kennedy, Annie M.	December 23, 1892.
Kennedy, Cora W.	May 4, 1894.
Kennedy, Wm. C.	December 31, 1893.
Kennedy, Kittie	March 17, 1896.
Kerlin, Charles W.	February 3, 1893.
Kerrins, Mamie	December 31, 1893.
Kershaw, Nellie	November 10, 1894.
Killey, Mrs. Clara S.	March 17, 1896.
King, Lizzie	July 12, 1892.
King, Anna A.	January 2, 1892.
King, Alicia A.	August 9, 1890.
Kissling, Rosa	July 29, 1891.
Kitto, Marguerite L.	December 31, 1893.
Klippel, Emilia C.	August 9, 1890.
Knapp, Martha M.	September 10, 1892.
Knauer, Frank S.	November 10, 1894.
Knight, Mary E.	November 10, 1894.
Knight, Lillian J.	July 12, 1892.
Knowlton, George H.	November 22, 1890.
Knowlton, Lydia A.	January 2, 1892.
Kobicke, Sophie	June 14, 1895.
Kollinger, Kate A.	April 1, 1893.
Kopp, Lilly	March 17, 1896.
Kraus, Lulu G.	September 20, 1895.
Kroll, Effie L.	June 4, 1893.
Kuhlman, Marcellus A.	March 17, 1896.
LaGrave, Mrs. Mattie	September 20, 1895.
Lahaney, Mary E.	April 8, 1895.
Lahiff, James T.	June 14, 1895.
Langenour, Lillie	August 8, 1893.
Lalande, Alice H.	July 12, 1892.
Lamb, Cora	March 30, 1892.
Landes, Fannie H.	June 4, 1893.
Lane, Annie E.	September 20, 1895.
Langam, Gurdon S.	July 29, 1891.
Larew, John S.	September 11, 1892.
Larky, George E.	December 23, 1892.
Larkin, Thomas P.	December 23, 1892.
Larsen, Mary Ann	August 8, 1893.
Latham, Charles E.	March 17, 1896.
Lathrop, Matilda E.	June 4, 1893.
Lathrop, Martha A.	June 4, 1893.
Laughlin, Lizzie	March 30, 1892.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Leadbetter, Hattie A.	April 8, 1895.
Leahy, Alice	February 3, 1893.
Leake, Amelia	November 10, 1894.
Learned, Emily G.	November 22, 1890.
Leathers, Mary	June 12, 1892.
Lee, Alice P.	November 22, 1890.
Lee, Mattie	June 14, 1895.
Leet, Cynthia P.	May 4, 1894.
Leggett, Cordelia	July 12, 1892.
Lemon, Florence	March 17, 1896.
Lennon, Kate L.	July 12, 1892.
Leonard, Jennie M.	November 22, 1890.
Leonard, Grace E.	September 11, 1892.
Leviele, Blanche	April 8, 1895.
Levy, Julia	June 4, 1893.
Lewis, Johanna C.	December 23, 1892.
Lewis, Frances R.	December 31, 1893.
Lewis, Laura M.	December 31, 1893.
Lewis, Minnie	December 9, 1890.
Lewis, Abbie L.	January 2, 1892.
Lichtenberg, Fannie	July 12, 1892.
Lieginger, Kate	June 14, 1895.
Limbaugh, Minnie L.	May 4, 1894.
Lindsay, Carl	September 11, 1892.
Lipowitz, Ellen A.	August 9, 1890.
Little, Charles S.	June 4, 1893.
Little, Dillie E.	December 31, 1893.
Lobdell, Hattie A.	March 17, 1896.
Logan, Ella L.	March 17, 1896.
Lords, Ella M.	August 8, 1893.
Loree, Warren	September 20, 1895.
Lorigan, Annie F.	July 29, 1891.
Loring, Nellie R.	July 29, 1891.
Lotman, B. Dena	May 4, 1894.
Loughlin, Daisy A.	April 8, 1895.
Lovejoy, Emma	December 13, 1895.
Lowrey, Nellie F.	June 13, 1896.
Lowery, Maggie E.	December 31, 1893.
Lowry, Ida M.	December 23, 1892.
Luckey, Bertha M.	December 27, 1894.
Luckey, George W. A.	December 27, 1894.
Lucy, Nellie E.	April 8, 1895.
Lumsden, Martha L.	March 17, 1896.
Lumsden, Fannie L.	August 8, 1893.
Lynch, Maggie M.	August 8, 1893.
Lynch, Mary A.	September 20, 1895.
Lynch, Josephine	April 8, 1895.
Lynch, Willis	June 13, 1896.
Lynch, Mary E.	April 8, 1895.
Lynch, Oscar J.	April 8, 1895.
Lynch, Harry W.	September 20, 1895.
Lyon, William H.	November 22, 1890.
Lyon, Ada	August 8, 1893.
Macauley, Sarah H.	November 10, 1894.
Mack, Oscar E.	August 9, 1890.
Macken, Margaret T.	April 8, 1895.
Macevoy, Minnie C.	March 17, 1896.
MacLeod, Emma B.	June 14, 1895.
Madden, Adelia E.	August 8, 1893.
Madden, Mary L.	November 22, 1890.
Maddocks, Erminia	January 2, 1892.
Maddrill, Ella	August 9, 1890.
Maher, Minnie	December 31, 1893.
Mahoney, Eily S.	November 10, 1894.
Mahoney, Margaret J.	December 23, 1892.
Mahoney, Lizzie T.	December 13, 1895.
Malcolm, William	July 29, 1891.
Malcolm, Norman B.	July 12, 1892.
Mallock, James	November 22, 1890.
Mallon, Grace	April 1, 1893.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Malone, Annie	March 25, 1891.
Mallory, George W.	April 8, 1895.
Manasse, Franz L.	May 4, 1894.
Mandeville, Kate	November 10, 1894.
Mann, James M.	November 22, 1890.
Mannen, Lily M.	November 10, 1894.
Mannseau, Annie	May 4, 1894.
Mantz, Robert W.	December 13, 1895.
Marden, Minnie A.	July 12, 1892.
Martin, Abbie L.	December 13, 1895.
Martin, Emelie L.	April 8, 1895.
Martin, Alice M.	March 30, 1892.
Martin, Clara E.	May 4, 1894.
Martin, Frank P.	December 23, 1892.
Martin, Lillie A.	February 3, 1893.
Mason, Cannie.	November 10, 1894.
Mason, Leola I.	November 10, 1894.
Mathews, Mack	July 12, 1892.
Mathews, Lizzie	April 1, 1893.
Matterson, Erastus P.	September 10, 1891.
Maxwell, Mary E.	November 22, 1890.
Maxwell, Annie D.	September 30, 1891.
Maxwell, Cyrus H.	February 3, 1893.
May, Ada	May 4, 1894.
Mayne, Bessie J.	December 13, 1895.
McAdams, Ida	August 9, 1890.
McAuliffe, Mary	July 12, 1892.
McCabe, Ella	August 9, 1890.
McCann, Margaret E.	August 9, 1890.
McCann, Pearl	August 9, 1890.
McCann, Fred. W.	April 8, 1895.
McCarthy, Ella L.	April 8, 1895.
McCarthy, Julia L.	March 17, 1896.
McCarthy, Nellie M.	January 23, 1891.
McCarty, John L.	July 29, 1891.
McCauley, Mary	January 23, 1891.
McCauley, Annie	September 10, 1892.
McClatchy, Ella K.	September 20, 1895.
McClellan, Ruth	April 8, 1895.
McClenathan, Birdie	November 10, 1894.
McConnell, Nettie V.	June 14, 1894.
McCormick, Lizzie J.	August 8, 1893.
McClery, Ella G.	July 12, 1892.
McClosky, Mary A.	May 4, 1894.
McCorkell, Lizzie	September 30, 1891.
McCormick, Flora	July 29, 1891.
McCracken, Catherina A.	April 8, 1895.
McCray, Ella L.	February 3, 1893.
McCroory, Mary	July 29, 1891.
McDonald, Ida V.	March 24, 1891.
McDonald, Eugenie R.	March 24, 1891.
McDonald, Mary	January 2, 1892.
McDonald, Thomas H.	December 23, 1892.
McDonnell, Louise A.	June 13, 1896.
McElroy, Nellie	September 30, 1891.
McFarlane, Laura	November 10, 1894.
McGaughey, Lizzie J.	November 22, 1890.
McFeely, Susie M.	September 20, 1895.
McGlinchey, Mary	July 2, 1892.
McGrann, Cora F.	July 12, 1892.
McGuire, Blanche A.	December 31, 1893.
McGuire, Minnie	May 4, 1894.
McHarry, Mattie	November 10, 1894.
McHugh, Mary C. T.	December 23, 1892.
McIntyre, George W.	June 4, 1893.
MacKay, William M.	November 10, 1894.
McKean, Lizzie	August 8, 1893.
McKenzie, Lizzie	January 2, 1892.
McKenzie, Helen	June 14, 1895.
McKnight, Henry H.	January 2, 1892.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
McLaren, Jennie	September 20, 1895.
McLaughlin, James H.	April 8, 1895.
McLaughlin, Abbey	September 20, 1895.
McLean, Mary H.	March 24, 1891.
McLean, Mary E.	December 31, 1893.
McManus, Mary C.	May 4, 1894.
McManus, Mollie	September 20, 1895.
McMillen, Clara	March 17, 1896.
McNeely, Ella C.	November 10, 1894.
McNichols, Maggie	August 9, 1890.
McNutt, Porter S.	August 8, 1893.
McPhail, Fannie A.	March 24, 1891.
McReynolds, Olula	March 17, 1896.
McVenn, Gertie E.	November 22, 1890.
Meehan, Maggie G.	July 29, 1891.
Meehan, Rose	November 10, 1894.
Meek, Mary E.	December 31, 1893.
Meador, Eliza L.	September 20, 1895.
Meamber, Kate	June 14, 1895.
Megerle, Lisetta	December 9, 1890.
Meily, Albion S.	May 4, 1894.
Mellette, Josiah H.	January 23, 1891.
Merchant, Ella F.	November 22, 1890.
Merritt, Alice J.	May 4, 1894.
Merry, Nellie	June 14, 1895.
Merriam, Ella F.	June 14, 1895.
Metcalf, Jennie D.	March 24, 1891.
Meyers, Lena	November 22, 1890.
Meyerstein, Frederica	June 14, 1895.
Michaels, Abbie M.	September 11, 1892.
Mikesell, Andrew J.	July 12, 1892.
Miley, Annette D.	November 10, 1894.
Miller, Sallie C.	January 2, 1892.
Miller, Eda	January 23, 1891.
Miller, Hattie E.	September 11, 1892.
Miller, Belle	July 29, 1891.
Miller, Nellie J.	July 12, 1892.
Miller, Lizzie	December 13, 1895.
Millhone, Belle	December 31, 1893.
Mills, Freeman B.	November 10, 1894.
Mills, Carrie M.	March 17, 1896.
Miner, Eda L.	August 8, 1893.
Minor, Grace D.	November 22, 1890.
Mitchell, James H.	August 9, 1890.
Mitchell, Belle	July 12, 1892.
Mitchell, Bertie	June 14, 1894.
Mitchell, Charles H.	September 20, 1895.
Mitchell, Mrs. Lizzie	March 17, 1896.
Mock, Clara E.	September 11, 1892.
Mogean, Maggie M.	February 3, 1893.
Monaghan, Lizzie C.	December 23, 1892.
Monroe, Joseph J.	March 30, 1892.
Montgomery, Clara	April 1, 1893.
Montgomery, Rosetta M.	December 9, 1890.
Mooney, Fannie	November 10, 1894.
Moore, Lizzie B.	December 23, 1892.
Moore, Mary E.	December 23, 1892.
Moore, Marguerite M.	April 1, 1893.
Moore, Ida M.	June 14, 1895.
Moore, Mattie A.	June 14, 1895.
Morehouse, H. May	December 13, 1895.
Morey, Fanny	March 24, 1891.
Morgan, Belle M.	August 8, 1893.
Morgan, Mary E.	December 27, 1894.
Morris, E. Clarissa	September 20, 1895.
Morris, Mary E.	August 9, 1890.
Morrow, Sarah	July 12, 1892.
Morton, Clayton E.	May 4, 1894.
Morton, Frank	July 12, 1892.
Moulton, Mrs. Edith	June 13, 1896.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Mulgrew, Alice M.	January 2, 1892.
Mulgrew, Mary T. A.	April 1, 1893.
Muller, Carl	August 9, 1890.
Muncey, Clara L.	September 11, 1892.
Munday, Alice	January 2, 1892.
Munday, Pamela H.	August 8, 1893.
Murch, Cartina	March 24, 1891.
Murdock, Grace R.	August 9, 1890.
Murnan, Frank T.	August 9, 1890.
Murphy, Anna C.	July 29, 1891.
Murphy, Ella F.	January 2, 1892.
Murray, Henry W.	July 12, 1892.
Needham, Harry B.	December 31, 1893.
Nelson, Thomas A.	December 31, 1893.
Newcum, Anna	November 10, 1894.
Newman, Kate	November 10, 1894.
Newton, Frankie L.	June 13, 1896.
Newton, Henry B.	March 17, 1896.
Nicholson, Elnie	March 17, 1896.
Nicewonger, Mrs. Agnes H.	December 13, 1895.
Niemann, Emily	July 12, 1892.
Nilon, Frank T.	August 9, 1890.
Norris, Albert	December 23, 1892.
Norris, Lizzie O.	March 17, 1896.
Norton, Mary E.	September 20, 1895.
Norton, Andrea	November 10, 1894.
Nuner, William M., Jr.	April 8, 1895.
O'Brien, Lizzie G.	June 14, 1895.
O'Brien, Annie T.	April 1, 1893.
O'Brien, Katie M.	November 10, 1894.
O'Connor, Mary	July 12, 1892.
O'Donnell, Sarah	December 31, 1893.
O'Donoughue, M. F.	November 22, 1890.
O'Farrell, Thomas	August 8, 1893.
Ogden, Esther E.	May 4, 1894.
Ogden, Nellie M.	June 13, 1896.
O'Hanlon, Fannie	June 4, 1893.
O'Hara, Kate F.	September 30, 1891.
O'Hara, Minnie L.	November 10, 1894.
Oliver, Mollie	September 30, 1891.
O'Linder, Selma B.	April 8, 1895.
Olmstead, Alma M.	December 31, 1893.
O'Mara, Joanna M.	December 23, 1892.
O'Neil, Kittie	January 2, 1892.
O'Reardon, Josie	August 9, 1890.
O'Rourke, Mamie	November 10, 1894.
O'Shaughnessy, Mary E.	June 13, 1896.
Orr, John A.	April 8, 1895.
Ortega, Caupolican	July 29, 1891.
Orton, Fannie B.	July 12, 1892.
Osborn, Fannie P.	July 12, 1892.
Osborne, Annis	August 9, 1890.
Ottmer, Florence H.	December 23, 1892.
Ousley, Clara M.	November 10, 1894.
Owen, Mae	July 29, 1891.
Owens, Sarah L.	August 9, 1890.
Owens, Mollie	June 14, 1895.
Paine, Maggie A.	August 8, 1893.
Palmer, Almira	June 13, 1896.
Palmer, Alice	September 20, 1895.
Pardow, Carrie L.	July 29, 1891.
Parker, Lizzie A.	July 12, 1892.
Parker, Hattie	November 22, 1890.
Parker, Phoebe L.	April 8, 1895.
Parks, Myra A.	September 30, 1891.
Parsons, Agnes M.	June 4, 1893.
Patten, Frances A.	July 29, 1891.
Patterson, Alma	July 29, 1891.
Patterson, Laura	February 3, 1893.
Patton, Libbie H.	July 29, 1891.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Patton, Della	August 9, 1890.
Pearce, Maud M.	September 20, 1895.
Peaslee, Mrs. Maud M.	March 17, 1896.
Pedrick, William L.	May 4, 1894.
Pemberton, James E.	March 24, 1891.
Pence, William M.	December 23, 1892.
Peters, Frances A.	December 23, 1892.
Petray, Henry C.	December 27, 1894.
Pfeiffer, Laura.	August 8, 1893.
Phelan, Ella	January 2, 1892.
Phillips, Thomas J.	November 22, 1890.
Phillips, Lucy U.	July 12, 1892.
Phillips, Etta	December 27, 1894.
Phillips, Mary E.	March 17, 1896.
Pillott, Mary	August 9, 1890.
Piper, Bertha L.	July 29, 1891.
Piper, Lillian A.	August 9, 1890.
Piper, Kingsbury B.	May 4, 1894.
Plumado, Mary E.	August 8, 1893.
Plummer, Amos W.	September 10, 1892.
Plummer, Charles B.	April 8, 1895.
Poage, Carrie	June 14, 1895.
Polhemus, Mary E.	November 22, 1890.
Pope, Libbie	September 10, 1892.
Porter, Annie S.	June 14, 1895.
Potter, Lulu	June 13, 1896.
Potter, Mary F.	September 20, 1895.
Powers, Vesta	August 8, 1893.
Pratt, Marion W.	June 13, 1896.
Prather, Emma L.	April 8, 1895.
Price, Edward B.	January 23, 1891.
Price, Mary Patton	June 4, 1893.
Proctor, Bertie E.	April 8, 1895.
Provost, Emma H.	December 31, 1893.
Pryal, Ella G.	September 20, 1895.
Pullman, Mary S.	December 27, 1894.
Purcell, Mary	June 14, 1895.
Purdy, Carlton	November 22, 1890.
Quimby, Eliza M.	September 30, 1891.
Raelet, Victorine M.	March 24, 1891.
Radford, Cassie	November 22, 1890.
Ragland, Rufus E.	June 13, 1896.
Raines, John W.	August 9, 1890.
Ralph, Cora B.	January 2, 1892.
Ramer, Wilhelmina	March 17, 1896.
Ray, Georgia	September 20, 1895.
Ray, Nellie	September 10, 1892.
Read, Minnie I.	September 20, 1895.
Reed, David C.	January 23, 1891.
Reese, Sara C.	March 30, 1892.
Reddin, Seldon E.	November 10, 1894.
Reilly, Regina	December 13, 1895.
Reinstein, Lena A.	November 22, 1890.
Remington, Carrie L.	August 9, 1890.
Renfro, James H.	July 12, 1892.
Renwick, Louise	December 31, 1893.
Reynolds, James E.	March 17, 1896.
Reynolds, May B.	December 13, 1895.
Richardson, Ada	December 31, 1893.
Richardson, Henry J.	July 12, 1892.
Richardson, Noble A.	August 9, 1890.
Riddle, Myrtle M.	June 14, 1895.
Riddell, George G.	April 8, 1895.
Riebsam, Henrietta E.	December 31, 1893.
Riely, Spurgeon	March 17, 1896.
Rigdon, Rufus	March 30, 1892.
Riley, George E.	May 4, 1894.
Riley, Margaret M.	December 31, 1893.
Ringo, M. Enna	July 12, 1892.
Rinehart, Annie L.	June 13, 1896.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Ritter, Franklin W.	December 9, 1890.
Rixon, Minnie A.	December 31, 1893.
Robert, Mary C.	March 17, 1896.
Robins, Helen A.	April 8, 1895.
Robertson, Minnie	June 14, 1895.
Robinson, Mary J.	August 9, 1890.
Roche, Tessie J.	May 4, 1894.
Rockwell, Bertha M.	December 13, 1895.
Rodden, Lizzie	April 8, 1895.
Rodgers, Charles H.	September 10, 1892.
Rogers, Fanny W.	November 10, 1894.
Rogers, Leonora	September 30, 1891.
Rogers, Lucy A.	September 20, 1895.
Roelke, Carrie A.	March 17, 1896.
Roelke, Sophia E.	December 23, 1892.
Rollins, Annie	December 23, 1892.
Roney, W. H.	September 30, 1891.
Roney, Ella E.	December 27, 1894.
Roney, Louise G.	April 8, 1895.
Rooney, Minnie	July 12, 1892.
Ross, Ella R.	January 2, 1892.
Ross, Angeline	June 13, 1896.
Ross, Clara C.	March 30, 1892.
Ross, Lizzie E.	July 12, 1892.
Rowe, Katie R.	November 10, 1894.
Rowell, Ruth F.	December 31, 1893.
Rubell, William T.	March 30, 1892.
Russell, Florence M.	November 22, 1890.
Russell, Annie F.	March 24, 1891.
Russell, Ella N.	September 30, 1891.
Russell, George C.	December 23, 1892.
Rutherford, Hettie	November 22, 1890.
Ryan, Nora E.	July 12, 1892.
Sabin, Minnie	August 9, 1890.
Sanford, Alfred W.	January 23, 1891.
Sanford, Paul	November 10, 1894.
Santif, Cecilia C.	November 10, 1894.
Sargent, Effie	November 10, 1894.
Sarles, Mrs. Julia R.	March 17, 1896.
Sawyer, Warren H.	June 13, 1896.
Scheier, Hattie	June 14, 1895.
Schilling, Lena	June 14, 1895.
Schendel, Ada	December 31, 1893.
Schoen, Lillie	December 31, 1893.
Scholl, Emma	December 13, 1895.
Scott, James	March 17, 1896.
Scott, Josephine	December 31, 1893.
Scott, W. H.	September 30, 1891.
Sears, Laura B.	September 20, 1895.
Sellman, George W.	April 1, 1893.
Selling, Eugenia	November 22, 1890.
Senter, Maggie M.	July 29, 1891.
Seward, Anna A.	July 12, 1892.
Sexton, Caroline M.	August 9, 1890.
Sexton, Juliet L.	March 17, 1896.
Sevier, Denver	March 24, 1891.
Sharkey, Minnie E.	July 29, 1891.
Shaw, Ida E.	May 4, 1894.
Shaw, Jeannette	May 4, 1894.
Shaw, Lorena I.	September 20, 1895.
Shattuck, Mattie H.	September 20, 1895.
Sheehan, Johanna C.	August 8, 1893.
Sheets, Anna E.	April 1, 1893.
Sheets, William H.	May 4, 1894.
Shelton, James R.	February 3, 1893.
Shepherd, Eva L.	December 23, 1892.
Sherer, Dora	July 29, 1891.
Sherman, Elizabeth M.	November 10, 1894.
Sherwood, Julia C.	May 4, 1894.
Shine, Nellie	June 13, 1896.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Shippee, Minnie H.	May 4, 1894.
Sibley, Lillian E.	September 20, 1895.
Simms, Esther	April 8, 1895.
Simmons, Katie	July 29, 1891.
Simmons, James H.	July 12, 1892.
Simons, Fred. W.	August 9, 1890.
Simmonds, Amanda	September 20, 1895.
Simpson, Lela A.	June 13, 1896.
Simpson, Cora A.	April 1, 1893.
Simpson, Emma J.	July 29, 1891.
Simpson, Sarah A.	July 12, 1892.
Sisson, William H.	August 9, 1890.
Skahaen, Hannah	August 9, 1890.
Skinner, Mary E.	August 8, 1893.
Slack, Katie F.	November 10, 1894.
Sledge, Sallie L.	March 17, 1896.
Sleep, William A.	November 10, 1894.
Smalley, Frances A.	April 8, 1895.
Smalley, Lelia M.	April 8, 1895.
Smale, John G.	March 17, 1896.
Smiley, Helen M.	August 8, 1893.
Smith, Preston W.	July 12, 1892.
Smith, Mattie	July 12, 1892.
Smith, Louisa	April 8, 1895.
Smith, Rebecca B.	September 20, 1895.
Smith, Maggie A.	December 27, 1894.
Smith, Helen A.	June 13, 1896.
Smith, Mary A.	April 8, 1895.
Smith, Addie G.	May 4, 1894.
Smith, Alice	August 8, 1893.
Smith, Clarence S.	December 23, 1892.
Smith, Emma E.	August 8, 1893.
Smith, Landrum	May 4, 1894.
Smith, May L.	December 31, 1893.
Smith, Sara A.	April 1, 1893.
Smith, Ida M.	November 22, 1890.
Smith, Legrand S.	July 29, 1891.
Smith, Lida	September 30, 1891.
Smith, Walter C.	March 30, 1892.
Smith, James L.	March 30, 1892.
Smyth, Jennie	August 9, 1890.
Smyth, S. Kate	May 4, 1894.
Snapp, Emma H.	March 17, 1896.
Snell, Joel A.	December 31, 1893.
Snodgrass, David S.	July 29, 1891.
Snowden, Florence	July 29, 1891.
Somers, Lelia	January 23, 1891.
Southworth, Maud A.	April 8, 1895.
Sowle, Etta	August 9, 1890.
Spaulding, Mary E.	August 8, 1893.
Spaulding, Mary F.	November 10, 1894.
Spear, Cora L.	March 30, 1892.
Springsteen, Zella	March 17, 1896.
Sproul, Alice	May 4, 1894.
Stalter, Minnie	March 17, 1896.
Stanfield, Hattie Van A. R.	June 4, 1893.
Staples, Alice L.	March 24, 1891.
Starbird, Attie T.	December 31, 1893.
Starbird, Mary B.	June 14, 1895.
Stebbins, Minnie G.	December 23, 1892.
Steel, John J.	March 17, 1896.
Steinmetz, Alice	February 3, 1893.
Stephens, Annie L.	September 20, 1895.
Stephenson, Nancy J.	June 13, 1896.
Sterling, Nellie	July 29, 1891.
Stern, Augusta	August 9, 1890.
Stern, May	June 13, 1896.
Stewart, Virginia	June 14, 1895.
Stewart, Fannie	March 17, 1896.
Stewart, Mary	February 3, 1893.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Stewart, Nettie	November 10, 1894.
Stier, Clara	July 12, 1892.
Stilts, Clemence	July 29, 1891.
Stimson, Charlotte J.	March 17, 1896.
Stockton, Emma	April 1, 1893.
Stockton, Robert Lee	December 31, 1893.
Stoddard, Clara M.	December 31, 1893.
Stokes, Lizzie H.	June 14, 1895.
Stone, Walter H.	September 20, 1895.
Stone, Eugenie B.	January 2, 1892.
Story, Mary	May 4, 1894.
Stovall, Anna M.	July 29, 1891.
Strang, Francis M.	September 20, 1895.
Strange, Helen	December 13, 1895.
Stringham, Jessie M.	April 8, 1895.
Strickfield, Annie	January 23, 1891.
Strother, Miss Johnnie	August 8, 1893.
Sullivan, Ella	July 12, 1892.
Sullivan, Annie M.	December 23, 1892.
Sullivan, Agnes	February 3, 1893.
Sullivan, Maggie A.	November 10, 1894.
Sullivan, Mary G.	December 31, 1893.
Sullivan, Sarah	May 4, 1894.
Summerton, Lizzie	August 8, 1893.
Summerville, Letitia	August 9, 1890.
Sykes, Francis R.	June 4, 1893.
Taber, Benjamin P.	December 23, 1892.
Taber, Ruhannah J.	December 23, 1892.
Tabor, Cora E.	April 8, 1895.
Taylor, Richard T.	September 20, 1895.
Taylor, Herbert L.	April 8, 1895.
Tenant, Dora	March 30, 1892.
Tenbrook, Ada G.	June 14, 1894.
Tenney, Alfred D.	March 30, 1892.
Thomas, William P.	March 24, 1891.
Thompson, Martha B.	August 8, 1893.
Thompson, Mattie	August 8, 1893.
Thompson, Mary E.	January 2, 1892.
Thompson, Jessie B.	January 2, 1892.
Tibbits, Mary L.	September 20, 1895.
Tiedeman, Dora W.	November 22, 1890.
Todd, Maud H.	September 30, 1891.
Todd, Nellie L.	August 8, 1893.
Todd, Mae	June 13, 1896.
Tompkins, Rose	December 31, 1893.
Towne, Hattie M.	November 22, 1890.
Torrey, Carrie F.	December 13, 1895.
Totten, Carrie	March 17, 1896.
Townes, Virginia	June 13, 1896.
Tracy, Maggie	April 8, 1895.
Tracy, Nora	April 8, 1895.
Treadwell, Henrietta E.	June 13, 1896.
Trask, Dummer K.	August 9, 1890.
Trovinger, Nettie	June 4, 1894.
Tubbs, Lottie	November 10, 1894.
Tucke, Mercie A.	November 10, 1894.
Tully, Lizzie P.	July 29, 1891.
Turner, Mary	November 22, 1890.
Turner, William B.	January 23, 1891.
Turner, Emma L.	September 20, 1895.
Turner, Martha M.	June 14, 1895.
Tuttle, Annabel	September 20, 1895.
Twining, Nathan C.	December 31, 1893.
Tyler, May W.	November 10, 1894.
Tyler, J. Alfred	September 20, 1895.
Ulen, Sadie	September 10, 1892.
Unger, Annie	September 30, 1891.
Updyke, Thos. J.	December 13, 1895.
Utter, J. F.	November 10, 1894.
Vandever, Mary	July 12, 1892.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Van Dusen, Marion S.	June 4, 1893.
Van Duyne, Eda M.	November 10, 1894.
Van Eaton, Ida C.	May 4, 1893.
Varcoe, George	August 9, 1890.
Variel, Carrie L.	December 31, 1893.
Vergon, Julius A.	March 17, 1896.
Vest, Thomas A.	December 9, 1890.
Von Glahn, Borchert H.	July 12, 1892.
Vore, Sarah E.	September 20, 1895.
Wagner, Mollie G.	January 23, 1891.
Wagner, Lizzie	August 9, 1890.
Wagner, Emily J.	December 30, 1892.
Wagner, Simon P.	June 13, 1896.
Waite, Mary E.	May 4, 1894.
Wakefield, Claude B.	September 30, 1891.
Walker, Abraham L.	December 31, 1893.
Walker, Fred.	July 12, 1892.
Walker, Lizzie	March 17, 1896.
Wallace, Emma	August 9, 1890.
Wallace, Mattie C.	July 29, 1891.
Walsh, Lizzie F.	September 30, 1891.
Walsh, Mollie E.	December 27, 1894.
Walsh, Mary V.	December 30, 1892.
Walter, H. Frank	December 30, 1892.
Walton, M. Agnes	June 14, 1894.
Ward, Mary V.	December 30, 1892.
Ward, Thomas P.	December 30, 1892.
Ward, Rose	December 27, 1894.
Warfield, Mary C.	August 9, 1890.
Washburne, Dora B.	December 30, 1892.
Watkins, Kate F.	August 9, 1890.
Watkins, Emma	May 4, 1894.
Watson, Charles N.	June 14, 1894.
Watson, Harry F.	December 31, 1893.
Watson, James Reade	September 20, 1895.
Wayland, Sarah	June 14, 1895.
Weaver, Carrie J.	June 13, 1896.
Weaver, Annie E.	June 14, 1894.
Webb, Hayward	June 14, 1894.
Webb, Holton	July 12, 1892.
Webb, Louis K.	July 29, 1891.
Weber, May Sinnott.	April 1, 1893.
Webber, Louis	September 20, 1895.
Webster, Abbie C.	December 31, 1893.
Webster, Mercedes F.	June 14, 1894.
Webster, Reginald H.	September 30, 1891.
Weed, Howard L.	July 12, 1892.
Week, Annie	July 29, 1891.
Week, Lena	January 12, 1894.
Weeks, Anna M.	August 8, 1893.
Weeks, Flora	January 23, 1891.
Weems, Harry L.	December 13, 1895.
Weir, Minnie E.	July 12, 1892.
Welsh, Madge A.	August 8, 1893.
Werner, Erner	March 17, 1896.
Westerman, Pleasant B.	June 4, 1893.
Weston, Augusta	August 9, 1890.
Westover, Mary L.	June 13, 1896.
Wetherell, Emma L.	March 17, 1896.
Wettig, Anna	May 4, 1894.
White, Jennie H.	July 29, 1891.
White, Winifred	November 22, 1890.
White, Harley M.	December 30, 1892.
White, Mary	March 17, 1896.
White, Mary E.	March 17, 1896.
White, Callie	December 13, 1895.
Whoolley, Kate L.	December 31, 1893.
Wible, Laura E.	May 4, 1894.
Wickersham, Florilla R.	January 2, 1892.
Wilcox, Eugenie B.	May 4, 1894.

EDUCATIONAL DIPLOMAS—Continued.

NAMES.	Expires.
Wilder, Susan W.	November 22, 1890.
Williams, Cecelia A.	February 3, 1893.
Williams, Sarah C.	May 4, 1894.
Williams, Louise A.	June 13, 1896.
Williams, Mercy C.	July 29, 1891.
Williamson, Jessie	January 2, 1892.
Willis, George F.	August 8, 1893.
Wills, Virginia N.	November 10, 1894.
Willson, Ida E.	May 4, 1894.
Wilson, Olive	December 30, 1892.
Wilson, Lewis B.	July 12, 1892.
Wilson, Emma A.	July 12, 1892.
Winchel, Fabius Maximus	August 8, 1893.
Winchester, Loleta C.	March 24, 1891.
Winter, Jennie	July 12, 1892.
Winter, Mattie B.	June 13, 1896.
Wood, Annie R.	August 8, 1893.
Wood, Hazel E.	June 14, 1894.
Wood, Job, Jr.	December 9, 1890.
Wood, Magnolia	July 12, 1892.
Wood, Mrs. Flora A.	September 20, 1895.
Woods, Verna	September 20, 1895.
Woodward, Marvin W.	March 24, 1891.
Woodland, Isabella C.	November 10, 1894.
Woodworth, Ella H.	November 10, 1894.
Worthing, Alice	June 14, 1895.
Wright, Mary B.	July 12, 1892.
Wright, Bertie C.	December 31, 1893.
Wright, Frances P.	May 4, 1894.
Wright, Mary E.	December 31, 1893.
Wyllie, Hattie L.	May 4, 1894.
Wyllie, George W.	November 22, 1890.
Wyllie, Ella T.	March 17, 1896.
Wymore, Maria A.	November 22, 1890.
Wythe, Margaret	November 22, 1890.
Young, Alice	November 10, 1894.
Zielian, John J.	June 4, 1893.
Zweybruck, Agnes	January 2, 1892.
Zweybruck, Edith	May 4, 1894.

HOLDERS OF EDUCATIONAL DIPLOMAS WHO HAVE DIED PREVIOUS TO
JUNE 30, 1890.

NAMES.	Expires.
Augustine, Marshall	August 8, 1893.
Dranga, Inanda L.	March 30, 1892.
Miller, Rachel A.	July 29, 1891.
Sanford, Lynn S.	November 10, 1894.
Soule, Ernest	May 4, 1894.
Soule, Maud	May 4, 1894.

EDUCATIONAL DIPLOMAS REVOKED.

NAMES.	Expires.
Buckley, Lily	March 30, 1892.

STATEMENT OF EXPENDITURES.

I hereby certify that I have expended out of the appropriations for this office, other than salaries, from July 1, 1888, to June 30, 1890, the following:

Fortieth Fiscal Year, ending June 30, 1889.

For contingent expenses	\$59 32
For postage, expressage, and telegraphing	803 63
For traveling expenses	1,196 70

Forty-first Fiscal Year, ending June 30, 1890.

For contingent expenses	\$148 26
For postage, expressage, and telegraphing	1,000 00
For traveling expenses	1,301 30

STATE OF CALIFORNIA, }
County of Sacramento. } ss.

I, Julia B. Hoitt, Deputy Superintendent of Public Instruction of the State of California, do swear that the above and foregoing contains a true and correct statement in detail of the manner in which appropriations for the support of the office of Superintendent of Public Instruction of the State of California, except salaries, were expended from July 1, 1888, to July 1, 1890.

JULIA B. HOITT,
Deputy Superintendent of Public Instruction.

Subscribed and sworn to before me, this twenty-fourth day of November, eighteen hundred and ninety.

J. S. WILLIAMS,
Deputy Clerk, Supreme Court.

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ERRATA.

Page 28, line 6, read "Laird" instead of "Lair."

Page 39, line 12, read "Two Readers and one Speller were adopted in September, 1886," instead of "The Readers and Spellers were issued in December, 1886."

Page 39, line 41, read "Government" for "Goverment."

Page 42, line 9, read "Kerl's Common School Grammar, 72," instead of Wells' English Grammar, 36."

Page 42, line 12, read "Total, \$4 90," instead of "Total, \$4 54."

Page 44, line 9, insert "Surveyor-General."

Page 232, name of John R. Brierly, deceased, should be omitted.

Page 266, name of John L. Wilson, deceased, should be omitted.

Page 122, insert "Sacramento City, Private Schools: Sacramento Business College, E. C. Atkinson, Principal; seven teachers, 364 students. Howe's High School, E. P. Howe, Principal. Bainbridge's Business Institute, J. C. Bainbridge, Principal. Crocker Art School, W. F. Jackson, Principal. Christian Bros.' College."

REPORT
OF THE
EXAMINING COMMISSION
ON
RIVERS AND HARBORS

TO THE
GOVERNOR OF CALIFORNIA.

C. F. REED,
C. E. GRUNSKY,
J. J. CRAWFORD,
COMMISSIONERS.



SACRAMENTO:

STATE OFFICE, : : : : : J. D. YOUNG, SUPT. STATE PRINTING.
1890.

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LETTER OF TRANSMITTAL.

OFFICE OF EXAMINING COMMISSION ON RIVERS AND HARBORS, }
SACRAMENTO, Cal., Sept. 27, 1890. }

To his Excellency R. W. WATERMAN, Governor of California:

SIR: In compliance with the provisions of the Act creating an Examining Commission on Rivers and Harbors, and prescribing their duties, approved March 19, 1889, we submit herewith our report upon the condition of the Sacramento and San Joaquin Rivers. Our work has been facilitated by the action of State Engineer Wm. Irelan, Jr., who placed the office of the State Engineer Department, in Sacramento, at our disposal, and gave us access to the maps and other data there collected, from which we have, by his permission, made liberal extracts. We desire, also, to acknowledge the coöperation of Major W. H. Heuer, of the Engineer Corps of the United States Army, in charge of Sacramento and San Joaquin Rivers, to whose maps and papers access was accorded. Our thanks are due to many residents of the Sacramento and San Joaquin Valleys for assistance and courtesies extended while we were engaged in the prosecution of our work.

Very respectfully,

C. F. REED.
C. E. GRUNSKY.
J. J. CRAWFORD.

NOTE.

All elevations noted in this report are referred to low-tide low-water of Suisun Bay, which is about 0.50 feet higher than the low tide of San Francisco Bay.

REPORT.

To his Excellency R. W. WATERMAN, Governor of California:

It has not been possible, in the limited time at the disposal of this Commission, to study the characteristic features of the river systems of California with that attention to detail which the subject requires.

Each river, by reason of the geological, topographical, climatic, and other conditions that prevail in its watershed area, and which are different from the conditions prevailing in the territory of every other river, must have a character peculiar to itself, and a thorough knowledge of this character is prerequisite to an intelligent discussion of works required for its permanent improvement.

We are fortunate in having been able to secure very complete topographical data concerning the main rivers of California—the Sacramento and San Joaquin—but no hydrographic data commensurate with the importance of these streams are available, nor could much new data be secured by us in the short period of our work.

Hydrographic work, such as determining the volume of the rivers' flow at important points along their courses, recording the water elevation, sounding, etc., should be carried on continually. It is only on the basis of the authentic records and results of such work that it becomes possible to determine the greatest volume of water which the rivers will be called upon to discharge at times of flood flow; that the effect of levees on water elevations, and on the erosive action in the river bed, can be determined; and that a system of river treatment, and of river improvement, can be devised, such that their efficiency cannot be questioned.

SACRAMENTO AND SAN JOAQUIN RIVER DELTAS.

Sacramento and San Joaquin Rivers, the drainways of the Great Central Valley of California, have a common outfall channel into Suisun Bay. Through this bay—which has a surface area of about fifty square miles, and whose tidal area is increased by one hundred square miles of swamp or marsh lands (submerged at each high tide) lying principally along its northern shore—the waters of the rivers flow toward, and through, Carquinez Straits. This bay, of comparatively still water, is the recipient of the drainage from an area of about fifty-seven thousand square miles, and in it a large portion of the lighter grades of silt carried by the rivers is deposited. Here the building of mud flats, the encroachment of the tule lands upon the formerly open water surface of the bay, is rapid.

Suisun Bay may be regarded as the remnant of the great inland sea which at one time covered the interior valley, and which, more recently, covered all those portions of this valley which are now embraced in the deltas of the two rivers under discussion.

Between the bay and the river deltas, the rivers with the swamp lands

adjacent to them, are confined between the Montezuma Hills on the north and a spur from the Coast Range on the south. At this point at the low stage of the rivers, the mean rise and fall of the tide is about six feet. A great body of very low land extends from here to the north, to the east, and to the southeast. Over five hundred square miles of the swamp land in the river deltas, and adjacent thereto, have less elevation than ten feet above low tide, or about seven feet above half tide in the bay. More than half of this tract was, before the reclamation of the swamp-land tracts had commenced, subject to inundation at each high tide, twice in twenty-four hours. To cover and uncover one half of this tract with water one foot deep, twice in twenty-four hours, would require an average flow of water back and forth through the Straits of Carquinez of more than three hundred thousand cubic feet per second.

This volume is far below the amount which actually did flow back and forth through the tidal portions of the rivers before levees interfered with its spreading over the land. The importance of such tidal flow in forming and maintaining the lower river channels can be better appreciated when this volume is compared with the present greatest possible flow of the Sacramento River at points between Sacramento and the head of Grand Island, where the river at flood does not carry one third of this volume.

As works of reclamation progress, this flow will continue to decrease, until it is limited to the small tidal flow required to raise the water surface in the waterways alone. Thereafter a new regimen will have to be gradually established for the channels of the lower rivers, adjusted to the flow of drainage water from above, and to the needs of navigation, and preserved to some extent, at least, by artificial work of channel building or deepening.

Perhaps it is a fortunate circumstance that the difficulties in the way of the reclamation of some of the many unreclaimed tracts of land in the river deltas appear almost insurmountable to their present owners, and have retarded reclamation, because it is certainly undesirable to reduce the tidal area above the river mouths, suddenly, to a minimum.

It is interesting to note how the lands of the deltas have been built up, and no discussion of the conditions, to be considered in devising a rational system of river treatment, can be complete without a reference to their character and to the causes which led to the formation of the peat deposits of which the delta lands are in large part composed. As soon as the general surface of the valley near the outfall of the rivers into the bay had been raised to such height that the main flow of water was in clearly defined waterways, the land building progressed with greater rapidity on the banks of these channels than at points remote from them. As soon as these were elevated above the low-water plane, so that vegetation could take root, they were covered with a growth of tule. The tule extended further and further from the waterways, as freshet after freshet brought down more sediment. Floating plants took possession of the ponds back of the tule-land rim around the islands; decaying vegetable matter was added to the sediment brought down by the water, and very soon the vegetable matter, entering into the soil composition, predominated to such an extent, that, except on the banks of the streams, the peat formation became characteristic of the river islands. So gradually was heavier material added, and so rapidly did the rank swamp-land growth add more material to its edges,

that, not infrequently, the peat was formed, without contact with subsoils, floating on water. Such floating tracts of peat land are found back of Mandeville Landing, on San Joaquin River, and at other points.

On the banks of all streams, in the tule lands of the valley, soil is a heavy loam or sediment containing some vegetable matter, generally enough of partially decayed roots, etc., to make it non-erosive. Receding from the bank, the proportion of sediment decreases more or less rapidly, merging into peat. The peat, or peat soil, forms a layer of varying thickness, four to twelve feet, resting on a soft muck or slush, and this in turn rests on a continuous hardpan bed which dips from east to west, being fourteen to twenty feet below the surface near the eastern limit of peat lands, and forty to sixty feet below the surface near the outfall of the rivers.

The river bank land, or the rim land of the tule islands, rises gradually toward the north and east, along the main channel and delta branches of the Sacramento River; and it rises, though less rapidly, to the south and east along the San Joaquin River and its branches. At the head of Grand Island (near Courtland), on Sacramento River, the elevation of the high river bank land is fourteen feet above low-tide low-water of Suisun Bay, and at the head of Roberts Island (head of Old River), on the San Joaquin, it is eighteen feet.

From the river banks toward the interior of each island, and from these banks toward the main land, there is, throughout the entire lower portions of the valley now under discussion, a rapid fall inland of the ground's surface. Each island is saucer-shaped, being encompassed by a rim of land higher than its interior, and upon each side of the valley's drainways, between them and the high plains, lies a depression or trough.

The general elevation of the bottom of the depression west of Sacramento River, opposite the head of Grand Island, is about five feet above low water of Suisun Bay (to which reference plan all elevations noted in this report are referred).

The lowest points on Grand Island are ten to fifteen feet lower than low water of Suisun Bay.

On Roberts Island the lowest ground is at or below the elevation of low water in Suisun Bay.

Examples could thus be multiplied showing the great extent of the region whose surface is barely elevated above the low-water plane of the ocean.

Before any attempts were made to transform portions of this region into cultivable fields, the rivers in times of flood swept over their banks and converted portions of these swamp-land tracts into a shallow sea connecting with and discharging into Suisun Bay. The river banks were long, low, overfall weirs, over which water flowed in thin sheets until the water surface in the depression adjacent to the river so overtopped the banks that, at the height of the floods, all trace of a channel was lost. This condition prevailed along Sacramento River to Sacramento, and along the San Joaquin to and above the head of Old River.

In the floods of 1853 and 1862, Sacramento River water extended in a broad expanse from the Sutter Fort site, in Sacramento, westward to Davisville, standing three feet deep across the natural river banks at and near Sacramento. The steamer course from Stockton to San Fran-

cisco was, during the latter flood, a direct line across country from Rough and Ready Island to Antioch.

General elevations of bank lands along the main rivers are practically the same to-day that they were thirty years ago. The same is true of the elevation of all the land in the river deltas. Thirty years, in the history of the growth of these valley lands, is too short a period to produce apparent changes other than local ones, which are an insufficient basis from which to determine the aggregate change. What we do note in this connection on both rivers, near their outfall into the bay, is a very strong tendency to build mud banks or flats in the river channels. These are generally in contact with bank lands, and have their tops covered with a tule growth. Bank lands are thus encroaching upon the river channels, and the recent changes to which residents along the rivers bear witness indicate that this tendency to reduce the waterways has been much more pronounced since 1850 than it could by any possibility have been before that time. Two causes can be assigned to this increased rate of bank building, to each of which the effect is due in part:

1. The operations of man have increased the quantity of material to be transported in suspension by the river waters.

2. The reclamation works have reduced the tidal area above the river mouths, and the consequent decrease of the erosive force of the tidal water flowing in the lower rivers must result in a decrease of waterway by a deposit of silt in the river channels.

Into the main swamp-land region of the Great Central Valley of California, as the same has above been briefly described, Sacramento River brings its water from the north, and San Joaquin River from the south. The portions of the two rivers which we desire to describe, with some attention to detail, in this report, are the Sacramento from the head of the Great Central Valley, a few miles above Red Bluff, to its mouth, and the San Joaquin River below Hills Ferry. Of the rivers above these points, we have but a few general remarks to make at this time.

SACRAMENTO VALLEY.

Emerging from Iron Cañon, about four miles above Red Bluff, Sacramento River enters Sacramento Valley. This valley, from the Cosumnes and Mokelumne Rivers on the south, to its northern apex, has a length of one hundred and forty miles. Its width southward from the latitude of Colusa is thirty to forty miles. Above Colusa the foothills upon the eastern and western margins of the valley gradually approach each other, being only twenty-five miles apart in the latitude of Chico, and closing around the head of the valley just above Red Bluff.

The valley lands are very smooth-surfaced, and have a remarkably uniform slope from the base of the hill lands toward the trough of the valley. At Red Bluff the general height of the valley is three hundred feet. Near Colusa the trough of the valley is fifty feet in height, and the valley edge at the base of the hills, to the east and to the west, may be noted at one hundred and twenty feet. At Sacramento the valley trough is only eleven feet in elevation, and the base of the Coast Range

hills is at one hundred and forty feet, while the base of the hills to the east is at about one hundred and twenty feet.

These figures present clearly a picture in rudest outline of the valley, showing a rapid slope from Red Bluff to Colusa (two hundred and fifty feet in sixty-five miles), a very much lighter slope from Colusa to Sacramento (thirty-nine feet in fifty miles), and thence to the outfall of the river into Suisun Bay, an almost level surface.

* The area of the Sacramento Valley is four thousand two hundred and fifty-two square miles, which may be classified as follows:

High hill lands, Sutter Buttes	56 square miles.
High plains, not overflowed	2,444 square miles.
Land subject to occasional overflow from tributary streams	450 square miles.
Lands naturally subject to flooding	1,254 square miles.
Channel surface of perennial streams	38 square miles.

The Sierra Nevada slopes toward this valley from the east. The waters draining from it are collected in the Feather River and its tributaries; in the American River, and in the many small streams entering Sacramento Valley from the east. The water of the small tributaries—Big Antelope, Little Antelope, Salt, Dry, Deer, Pine, Rock, and Mud Creeks—enters directly into the Sacramento River channel; also a portion of Chico Creek water. Butte Creek, Table Mountain Creek, and other small streams, however, which enter the valley between Chico Creek and Feather River, have no direct outlets to the river. Their waters are discharged into the east-side valley trough, or depression, which here also, as in the case of the lower rivers, lies between high river bank land on the west, and high plain land on the east, and in this trough they flow—sometimes in channels or sloughs, and again in the broad swale without channels—southerly to a passage just west of the Sutter Buttes, into a continuation of the east-side trough, the Sutter Basin, and through this into Sacramento or Feather River, just above their junction.

The water of the small streams which drain the low foothill region between Honcut Creek and Yuba River, is discharged into the pocket between Feather and Yuba Rivers, just to the north and northeast of Marysville, and at falling stages of Feather River reaches this stream above that city.

Bear River, one of the principal tributaries of Feather River, after passing that point in its lower course, generally referred to as "The Narrows," spreads over the bank lands of Feather River, and has no well defined mouth.

All of the foothill drainage collecting in Coon Creek, Auburn Ravine, Arcade Creek, and other small watercourses between Bear River and American River, is discharged into the trough or basin on the east side of the Sacramento River, just north of American River, and thence it finds its way into Sacramento River across river banks, or through the sloughs draining this basin (American Basin) at low stages of the river.

The drainage from the hills south of the American River nearly all finds its way into tributaries of Cosumnes River, a small amount only being collected by Willow Slough and other small surface drains south of Sacramento, and collecting in the depression between Sacramento and Mokelumne Rivers.

* Estimates by State Engineer Department.

The Coast Range rises from the western edge of the Sacramento Valley. Its eastern slope, to the extent of four thousand five hundred square miles, drains into the Sacramento Valley. The streams, descending from this part of the Coast Range, which are directly tributary to Sacramento River, are Reeds Creek, Red Bank Creek, Thomas Creek, and Stony Creek, besides a few smaller watercourses above Stony Creek. All the water entering the valley from the west, south of Stony Creek, and above the country tributary to Cache Creek, flows into the great west-side depression, the Colusa Basin, which extends from above Colusa to the ridge built out by Cache Creek from the west to the river bank at Grafton (Knights Landing). Collecting in this basin this water is at low stages of the river delivered into Sacramento River through Lower Sycamore Slough. The bottom of the basin is, however, so low that complete drainage through the slough is at present impossible.

Cache Creek, Putah Creek, and the smaller streams which collect the drainage waters from the eastern slope of the Coast Range south of Cache Creek to the Montezuma Hills, all discharge into the Yolo Basin, which extends for forty miles along the west side of Sacramento River, from Grafton, almost due south to the mouth of Cache Slough, at the lower end of Grand Island. This basin has an average width of over five miles, and, as already stated, its points of greatest depression are below the level of low water in the bay, and its complete drainage, by gravity flow through natural channels, is not possible.

At times of extreme high water, there has always been a great discharge of water from Sacramento River across natural banks and through crevasses in the levee into this basin. The result has been that the basin has, at such times, always acted as a relief canal for the river. That it has carried no inconsiderable amount of water at such flood stages is evidenced by the fact that its water surface at such stages has a slope from north to south of very nearly six inches per mile. It was, in 1879, when not within six feet of its extreme flood height, carrying sixty-six thousand cubic feet* per second through the openings under the railroad track, between Sacramento and Davis, and at its greatest height of water in 1881, its flow was at least one hundred and eighty-five thousand cubic feet per second.

The water thus flowing parallel to the river reënters its channel through Cache Slough. While the basin is being filled by a flood, it is, to some extent at least, an outfall point for a portion of the river water. At such times there may be a strong flow of water up Cache Slough to the basin. This, as soon as the basin is full, in returning, augments the flow of the main stream below Cache Slough, and produces, at the point where the water reënters the river, greater water elevations than would there result, if only the water in excess of a full Yolo Basin were returned to the stream.

Referring to the extent of inundations in Sacramento Valley, the State Engineer in his report of 1880 says:

During the high water of March, 1879, the low lands of the Sacramento Valley, to the extent of about eight hundred and forty-seven square miles, were covered with water. This area includes all flooded for a short period of time, as well as that upon which the water rested for several months. Above the mouth of Feather River, in what may be called the upper flood region, the area covered was about four hundred and eighty-three square miles; and below that point, in what is called the lower flood region, the flooded area was about three hundred and sixty-four square miles in extent.

*Careful measurement by C. H. Kluegel, for State Engineer Department, in February, 1879.

Although the waters flowing through Sacramento Valley and the surface drainage of the valley itself, commingle with the waters flowing to the bay through San Joaquin Valley at and near the point of outfall to the bay, there is no reason why the drainage of the one valley should not be treated as a problem entirely distinct from the drainage problem of the other valley, in so far as the same relates to the bringing of water to the common point of outfall.

SACRAMENTO RIVER.

The water from a large portion of northeastern California collects in the Upper Sacramento, McCloud, and Pit Rivers, and, flowing in a southerly direction, breaks through the low ridge of hills between Shasta Valley and the Great Central Valley, in a rocky gorge generally known as Iron Cañon. The river, thus entering the Sacramento Valley at its extreme northern apex, has an aggregate drainage area of about nine thousand nine hundred square miles. This area includes the Goose Lake drainage basin, into which flow the drainage waters from some nine hundred square miles in the southern portion of Oregon, besides those from four hundred square miles of territory in California. This basin is a portion of the Pit River watershed, and almost takes rank as an interior basin. No water flows from the lake into Pit River, except in the years which follow a season of extraordinary rainfall. It is quite probable that no water from this part of its watershed has reached Sacramento River since 1862. The mean annual rainfall within the watershed of Pit River is ten to fifteen inches. For some points in the mountain region tributary to McCloud and Upper Sacramento Rivers it exceeds sixty inches. Pit River from its source, at Goose Lake, to its junction with the Upper Sacramento, is a very long stream, with a comparatively narrow drainage basin. Consequently it rises and falls but slowly.

The main flood volume of the Sacramento at times of great freshets comes from the region drained by the McCloud and the Upper Sacramento Rivers, and from the district tributary to the main river between the mouth of the Pit and Iron Cañon.

A protracted heavy rainfall or a warm rain on snow may, in a very few days, cause the river at Red Bluff to rise from almost low-water stage to the height of ordinary winter floods, or about twenty-two feet above low water.

The highest water recorded at Red Bluff, in February, 1881, attained an elevation of twenty-eight and one half feet above the low-water plane (*i. e.*, above Gauge Zero supposed be L. W.=244.1 feet. Top of tie=307.1 feet at the Red Bluff railroad depot). But the high-water stage at this point is never a protracted high stage. The river rises rapidly and, upon the passage of the flood, falls rapidly.

It is interesting to note in this connection that the extreme high-water flow of the river at Red Bluff is about two hundred and forty thousand cubic feet per second, while its average flood flow is very much less. Thus, for example, at the time of the freshet in March, 1879, its average flow for the flood period, from March fourth to March twentieth, inclusive, was only about forty-five thousand cubic feet per second. For a short time during this high stage the river was nearly

twenty-three feet above its low-water stage at Red Bluff, and was discharging water into Sacramento Valley at the rate of about one hundred and sixty thousand cubic feet per second.

In Iron Cañon the Sacramento River is, at its lowest stages, confined to a narrow gorge, through which its water flows with great swiftness. This gorge is in some places less than sixty feet in width at the surface, and precludes the possibility of navigation through this cañon at low-water stages. Navigation is impracticable, too, at the river's high stages, though there is then no lack of water. The rise of water in the cañon has quite recently been fully fifty feet above its low-water plane. The rapids in the cañon may have been passed by steamboats, but the perils to navigation extend through so long a portion of the river, and are so great, that the navigation of this part of the river is impracticable at the present time.

Sacramento River has, however, by legislative enactment, been declared a public way to the mouth of Middle Creek (several miles above Anderson), in Shasta County. This enactment, if it have the force of law and be not disregarded, would seem to make it necessary, when bridges are constructed across that part of the river lying between the legal head of navigation and the practical head of navigation, to provide them with openings for the passage of steamboats, even though it be known that none will ever pass.

SACRAMENTO RIVER THROUGH THE VALLEY.

Through the Sacramento Valley, as above described, Sacramento River flows in a southerly direction, dividing the valley into two almost equal portions. Its total length, from the head of the Sacramento Valley to a point in its mouth opposite New York, is two hundred and sixty miles. Its low-water fall in this distance is very nearly two hundred and sixty feet, making the average fall for the entire course of the river through the valley about one foot per mile. This fall is not, however, uniformly distributed from the upper to the lower end of the valley. The gradient of the river is light in its lower reaches, and very much greater near the head of the valley. The character of the river, of its bank lands, and of its behavior at times, when taxed to the utmost as a drainway, is very different at different points of its course, and a consideration of these conditions and phenomena enable a ready division of the valley portion of Sacramento River into the following natural divisions:

1. Iron Cañon to Stony Creek.
2. Stony Creek to Butte Slough.
3. Butte Slough to Feather River.
4. Feather River to head of Steamboat Slough.
- 5 (a). Old Sacramento River.
- 5 (b). Steamboat (Merritt) Slough.
6. Foot of Grand Island to Collinsville.

TABLE OF DISTANCES AND LOW-WATER GRADES.

STATION.	Length of Channel— Miles.	Low Water, 1880 to 1889— Elevation.	Total Fall Low Water— Feet.	Grade Fall Per Mile— Feet.
Iron Cañon.....	58.2	258.5	149.5	2.57
Stony Creek.....	52.8	109.0	68.0	1.29
Butte Slough.....	64.6	41.0	22.0	0.34
Feather River.....	47.5	19.0	13.5	0.29
Head Steamboat Slough.....	*18.3	5.5	*4.3	*0.23
Foot of Grand Island.....	15.8	1.2	1.2	0.076
Collinsville.....		0.0		

Before describing each of these several river divisions in detail, it is necessary to say a few words about the general character of the river in each.

In the first division, to Stony Creek, the river follows the thread of the valley. Lands rise from both banks of the river toward the hills. All small streams from the east and west discharge their waters directly into the main stream. There are no extensive continuous basins or depressions, lower than bank lands, to the right and left of this part of the river. The river's capacity is sufficient to pass ordinary floods within bank heights, and the waters of greater floods, which overtop portions of the bank lands, are all returned to the main channel within this division. In this division the river is constantly changing its alignment; but the extent of change is limited by two lines of hardpan, or firm clay banks, which break off toward the river at the distance of one to two miles from each other. The position of these is sometimes, though not always, marked by a rise of the valley surface. Between them the soil is alluvial, of recent formation, easily eroded, forming steep, rapidly caving banks.

In the second division, from Stony Creek to Butte Slough, the river receives no tributaries. Bank lands slope away from the river. The bottoms of the east and west-side basins are sometimes four to six miles from the river, and toward these the slope of the valley surface is gradual, and generally very uniform. The river is deficient in capacity. Ordinary floods overtop the river banks. The water, which escapes from the river channel, collects on the east side in a perfect network of sloughs, which are fed by this water, and by water from Chico Creek, Little Chico Creek, and other streams. Through these sloughs the east-side overflow reaches Angel Slough and flows into Butte Basin, and thence southward. The water which escapes from the river channel, toward the west, holds a southerly course, parallel to the river, and cannot reënter the main channel until the Colusa Basin holds its water as high at the mouth of lower Sycamore Slough as the river water at that point. But it remains to be said of this division, that its capacity, insufficient though it be to pass ordinary floods at bank heights, shows a slight, very nearly uniform decrease from its upper to its lower end.

The same decrease of capacity of the natural waterway which was

* Via Old Sacramento River—the main channel.

noted from the first division to the second, is to be noted also for the river as it enters the third division at Butte Slough. In this division, from Butte Slough to the Feather River, which is sixty-five miles in length, the river has remarkably uniform channel dimensions. Its capacity is less than one fourth of that required to pass the extreme flood flow of the river. In some respects it is similar to the second division. The land slopes from the river toward the Sutter and Colusa Basins. Drainage water from the hill and valley lands accumulates in the basins and does not enter the river directly. Bank lands are here firm and yield very slowly to the erosive action of the river. The regimen of the river is well established, and the only recent change to be noted is the rise of the low-water plane, from Feather River up to Grafton, which is due to the great recent deposit of sand in the Sacramento River channel, below Feather River.

At the head of the fourth division, or rather just above the same, much of the water which escapes from the river at the head of the second and third river divisions reënters the river channel. Here the river receives also the water of Feather River, and twenty miles below it is reinforced by the American River. It has no other direct tributaries in this division. The sands brought down by the two rivers just named have caused recent changes of great magnitude in this part of the river, which now affords less than two thirds of its original waterway when bank full. In its original condition, the river, when bank full, could not pass such flood volumes as those of 1853 and 1862. It requires no argument to show the necessity of increasing the drainage capacity of this part of the Sacramento River. The rise and fall of the tides in the river at Sacramento was about two feet in the years 1849 to 1860. It was nine inches in 1871. Now, there is none. Low water was below zero on the gauge rod in Sacramento in 1849; it was zero as late as 1856; it was five and a half feet in 1878, and it has been between seven and eight feet in the years 1880 to 1889. In this year, 1890, we note it at ten and a half feet (September twenty-seventh). The bottom of the river bed is now higher than the old low-water surface of the river.

In October, 1870, at a low-water stage of the Sacramento, an examination of the Hog's Back on Steamboat Slough, and of Haycock Shoals in Sacramento River, was made by Lieutenant W. H. Heuer (now Major), of the Engineer Corps, U. S. Army, and he then reported as follows:

Between Sacramento and Haycock Shoals the river makes several bends, at each of which the river narrows to about one half its average width. Just above and within two hundred yards of the contraction, is where the shoals are found. The least depth of water on these shoals in the channel is seven feet, but in the bends we found twenty to thirty feet depth of water. After leaving the bends, the water becomes less deep, averaging about ten feet. * * * The deposit or shoal is a mixture of sand and mud. * * * The banks vary in height from five to twenty-five feet. * * * At Sacramento the mean observed rise and fall of the tides is about nine inches. The tide gradually increases as we proceed down the river. The extreme observed tide at Hog's Back (thirty-nine miles down the river) was four and a half feet. * * * A channel seven feet deep and one hundred feet wide is found from Sacramento to below Haycock Shoals. * * *

The Hog's Back is not a well defined single bar, but it is a series of shoals, having seven to eight feet depth of water between. The distance from the upper to the lower of these shoals is about three and a half miles. A channel seven feet deep and seventy-five feet wide in its narrowest parts is found over these shoals. The average width of the seven-foot channel is two hundred feet. There is but one of these shoals that contains as little as seven feet of water; it is known as Eagle's Nest, and is four hundred feet across. Each of the other shoals have eight feet of water over them. * * * The steamboats that navigate the Sacramento River * * * are magnificent boats. Numerous sailing vessels also ply between San Francisco and Sacramento. Sailing vessels frequently ground in making the trip, but that is probably due to their inability to keep in the channel. Steamboats do not run aground often.

The extent to which the river has deteriorated as a navigable waterway will be made plain by a comparison of the above extracts with extracts from Major Heuer's official reports of 1888 and 1889. But in making the comparison it must be remembered that the gauge reading at Sacramento in October, 1870, was about three feet, and that the low-water gauge reading in 1887 and in 1888 was seven and one tenth feet. It must also be remembered that the boats in use on the Sacramento at the late dates had a draught of only four feet, and frequently had to be lightered before they could cross the bar below the city of Sacramento. In his report of 1888, Major Heuer says:

Since the use of the United States snag boat in 1881, the river has been kept in fairly good boating condition, the expenses of transportation have been reduced; commerce has increased, and the expense of removing the snags by snag boats, as compared with prices paid contractors heretofore, is less than one half, and accidents to boats or barges are now of the rarest occurrence. The upper part of the river is really in a better boating condition for the class of boats using it than is the part of the river at and below Sacramento.

In the report of 1889 we read:

During the year a bar, opposite the lower part of the city of Sacramento, gave a great deal of trouble on account of shoal water.

The following extract is from remarks of L. L. Robinson, President of the Miners' Association, before the House Committee on Water Rights and Drainage, February 17, 1887:

There can be no doubt * * * that the miners have contributed materially to the filling of the mining rivers ever since mining commenced in California, and that the people whose lands have been covered by debris have a right to complain, and had they, when the evil first commenced, taken proper measures, the money value of their injury could have been compensated. * * * It was not until the flood of 1861-2 swept down into the lower streams the thirteen or fourteen years' accumulations in the mountains of mining debris, that the evil began to be very injurious. That every creek, gulch, stream, cañon, or bar, was, up to that time, swarming with miners, is well known. Perhaps no better evidence of the fact can be shown than the yield of gold during the intervals of time between 1848 and including 1861:

From 1848 to and including 1849, it was only	\$10,306,661 00
From 1849 to and including 1854, it was only	335,553,456 00
From 1854 to and including 1859, it was only	249,060,717 00
From 1859 to and including 1861, it was only	35,080,158 00

Total from commencement of 1848 to close of 1861..... \$680,990,992 00

The largest yields were in 1851, \$75,938,232; and in 1852, \$81,294,700. The yield for 1886 was only \$12,579,356, being the smallest yield ever known. The total yield, so far as known, has been \$1,144,364,521; but it is believed that the actual yield has been in excess of this sum—certainly up to \$1,200,000,000.

During the first thirteen years, or up to the time when the flood of 1861-62 filled the mining rivers, more than one half of the total product (or \$680,000,000) was extracted, while during the twenty-five succeeding years some \$466,000,000 only was extracted. Hydraulic mining did not commence on a large scale until about 1867, although it was some years after that date before it assumed the proportions of 1880. Prior to 1867 it was carried on upon a very limited scale.

The myriads of miners at work on the west slope of the Sierra deposited their tailings—all of a light character—into the streams adjacent to where they worked, for water was scarce and expensive, and as every miner so disposed of his tailings as not to deposit them upon the claim below him, these vast quantities accumulated until the flood of 1861-62 swept them all into the rivers, and the evils now complained of then became of a serious nature. After this time the miners on the Yuba contributed \$80,000, unasked, to aid in building levees along the south side of that river above Marysville. So that all the evils now complained of are not chargeable to the hydraulic miners. It is, however, upon the heads of the present miners, that the doings of nearly forty years now falls, to their ruin and to their loss to an extent of over \$100,000,000.

The Sacramento River, in the fifth division, as above noted, is a divided stream. Its main channel is Old Sacramento River, from which

Georgiana Slough breaks off toward Mokelumne River. Its lesser branch is Steamboat Slough, also called Merritt Slough, below the mouth of Sutter Slough. Grand Island lies between Steamboat Slough and Old Sacramento River. The river in this division lies within the reach of tides, but the tidal flow is relatively small.

In the sixth division, from the foot of Grand Island to its mouth, Sacramento River is a broad tidal stream. Its natural banks, except at Rio Vista and near Tolands Landing, where spurs of the Montezuma Hills break off toward the river, are low. In this division the tendency to shoal, as at Newtown, above Rio Vista, where the river has more than average width, and near the mouth of the stream, where mud banks are building, will require further notice in the appropriate chapter of this report.

Col. G. H. Mendell, Engineer Corps, U. S. Army, on the basis of a report by L. J. Le Conte, Assistant Engineer, in reporting upon the condition of Sacramento River, in December, 1874, says:

The river is subject to excessive floods, the water rising as high as thirty feet at Red Bluff, twenty-five feet at Sacramento, and twelve feet near its mouth. * * * The highest point to which it has been navigated is Red Bluff. * * * The river below Sacramento is affected by the tide; at Sacramento, the mean rise is stated by Capt. Heuer to be nine inches (in 1871), while at the Hog's Back, forty miles below Sacramento, a rise of four and one half feet was observed. This rise is, however, a maximum and not a mean. * * * It has already been stated that Red Bluff is at the head of navigation. In former years the trade of this village, and of all the country to the north of this point, necessarily took the route of the river, but within the past three or four years, the California and Oregon Railroad has been extended beyond this point, and no boat has ascended the river to Red Bluff, or even Tehama, for more than two years. * * * Although Jacinto is the present head of regular navigation, yet, when the grain crop is ready for the market, boats and barges go now as far as Soule Bar, which is about twenty-five miles above Jacinto, and, if the river was cleared of snags and otherwise improved, the grain boats would doubtless go higher.

In a report made six years later, Colonel Mendell says:

Beginning at Colusa, going up stream, the low river fall averages, for the first twenty miles, fourteen inches per mile; in the next sixteen miles, the fall is eighteen inches per mile; then it increases to twenty-one inches per mile, and for forty miles below Red Bluff, the fall is on an average thirty inches to the mile. Below Colusa, the fall per mile, for the first thirty-five miles, averages five and one half inches. * * *

This fall in the upper river is, of course, not a uniform fall. It is made up in deep pools, having a low velocity, separated by rapids of shoal water, over which the declivity is quite steep.

The principal falls are the Tehama Rapids and Sam Soule Rapids. In the former there is a fall of eight feet in five thousand feet of channel, and at Sam Soule's the fall is four and three quarters feet in four thousand feet. There are a number of other rapids in which the velocity is great and the depth scant.

On the Tehama Rapids there is sufficient water for navigation in spite of the great declivity.

These rapids occur in the portion of the river which carries gravel. Any other material would yield under this velocity. * * *

The water supply of the river is a very favorable feature. There is always a sufficient supply, when properly controlled, to permit navigation.

The low-water discharge at the city of Sacramento, below the entrance of all tributaries, is six thousand cubic feet per second. The Feather and American, the only tributaries between Sacramento and Colusa, supply two thousand cubic feet per second, of which one thousand eight hundred come from the Feather. This gives four thousand cubic feet per second for the supply in the upper river, supposing none to be lost in passage.

The low-water period is in the autumn. The rains of winter usually keep the river at a good stage until it is reinforced by the melting of snows in the spring. The freshet from snow is generally past by the first of July, and the river begins to fall, the lowest stage prevailing from September until the rains begin.

The area of the drainage basin of the river is more than twenty thousand square miles. This basin is for the greater part made up of mountains, which rise to a considerable height, in some cases of the Sierra Nevada of eleven thousand feet, while Mount Shasta, which lies near the headwaters of the river, has an altitude of fourteen thousand feet. These mountains serve as reservoirs to keep back the moisture of winter for the supply of the river in the many months in which there is no rain. In the higher parts of this

drainage basin the precipitation of rain in the three or four months of winter reaches ninety and more inches. On the plains the fall is less than one third of this amount. This concentration of a large rainfall, within a few months, makes it possible, under special circumstances, for the river to be swollen to enormous dimensions. A warm rain succeeding a heavy fall in the mountains, by melting the snow, is liable to make a flood which the river bed cannot pretend to carry. This kind of a flood may be called phenomenal, from the rareness of its occurrence. As a rule, however, each year, for a short time in the winter, taxes the capacity of the river, and quite frequently its capacity is overtaxed.

The following extracts are from the report of the State Engineer for 1880:

After this examination of the river throughout its valley course, if we glance over the field we find a channel which, in its present condition, is not, in any one single division of its course, capable of affording passage to the maximum volume of the ordinary high floods of the valley as they would be presented to it if confined between banks with levees all brought to a height uniform with the average of those which now exist in the several divisions, and in most divisions, even if the levees were brought to a height uniform with the highest that exist.

We find, moreover, several divisions of small capacity, generally, throughout their length—as, for instance, from Butte Slough to the mouth of Feather River—deficient in grade and width, and suffering from excessive bend resistance, thus diminishing the flood flow by reason of its tortuous course. And, again, where the river is restricted in capacity by the effect of the division of its waters at Grand Island, and the construction of levees close up to the banks of streams already too narrow. * * *

The river has always been one of poor regimen—great variation of capacity to pass the waves of flood through its different divisions—and its channel has always had serious local defects, which have acted as obstructions to the passage of flood waters. Thus, for one hundred and six miles and more above the head of Butte Slough, there is a channel of *greater grade and greater dimensions than there is below*, all the way to the mouth of the Feather River, a distance of sixty-four and one half miles.

1. IRON CAÑON TO STONY CREEK.

After flowing through Iron Cañon and emerging from this rocky gorge, the Sacramento River flows for several miles in a southwesterly direction in a very straight channel, uniform in character and dimensions. The bluff bank on the left, or valley, side of the river is just high enough to confine ordinary flood waters. The river here has a fall of three feet per mile; its banks are a firm, yellow clay, which resists erosion. They are slightly wooded. The channel width at low-water surface is about five hundred feet, and this may be taken as the average effective channel width from the low-water to the high-water plane. Gravel, cobbles, and small bowlders form the river bottom. A rise of thirty feet at this point, and of twenty-eight and one half feet at Red Bluff, indicate two hundred and forty thousand cubic feet per second as the maximum flow of water through Iron Cañon into the Sacramento, at the height of extreme floods. For a discussion of the drainage problem in Sacramento Valley it is of far greater importance to know the aggregate volume of water which passes this point from day to day, during the continuance of floods, than it is to know the maximum flow which may continue only for a moment. We are forced to admit that, in the absence of a State Department of Public Works, which should have charge of the collection of data of this character, there are no reliable figures available that will enable us to determine how much water enters the valley at this point for distribution to the river channel, and to the several overflow basins, during protracted high stages. The State Engineer Department affords information concerning one high stage only—that of March, 1879—and for this high-water period the estimates of flow are but rude approximations.

It is very evident that an extreme flood at the head of the valley, of

short duration, may discharge barely enough water in the aggregate to fill the river channel from a low stage to bank heights. A protracted medium stage at the same point where the river's capacity is many times greater than in its lower reaches, may, however, be the cause of unusual high water in the lower divisions of the river. To fill the river from its low-water stage to bank heights, eleven billion cubic feet of water are required, and this volume represents a full flood flow of more than twelve hours' duration at Iron Cañon. During the high-water period of March 4 to March 20, 1879, according to the State Engineer Department estimates, about sixty-eight billion six hundred million cubic feet of water flowed through Iron Cañon. The greatest flood flow during that period, with the water surface at Red Bluff about twenty-three feet above the low-water stage, was one hundred and sixty thousand cubic feet; yet the average flow of the river during the whole flood period was only about fifty thousand cubic feet per second.

The river from Red Bluff, just below Iron Cañon, to the mouth of Stony Creek, flows through alluvial deposits, which fill up the space between the hardpan banks already referred to. Bank erosion in bends is rapid, but ceases when the hardpan bluff is reached; and the silting up of old channels is equally rapid. At its low stages the river flows from pool to pool over gravel-bar riffles. The gravel bars are constantly being pushed down stream, and become foundations for new bank lands as the river encroaches upon the bank opposite to the bar.

In this division the river has ample capacity to pass its flood volumes. An attempt to prevent the inundation of the alluvial lands between the hardpan limits would be premature, except when local interests of great magnitude would warrant the holding of the river to established lines by works of bank protection, which would be of local utility only, and need not be considered at this time.

This part of the river is navigable, but navigation at the present time seems to be profitable only to McIntosh Landing, about fifteen miles above the mouth of Stony Creek. Though this landing is the present head of profitable navigation, there is no doubt that the fact of the river's being navigable has the usual influence upon freight rates, at least as far as Red Bluff.

Navigation interests are fully subserved in this division of the river by executing temporary works of the class in ordinary use by the United States engineers to confine the river water to narrow channels across bars, and to remove snags. The annual cost of removing snags could, however, be greatly reduced if the timber were cut from caving banks. It should be made obligatory upon the land owner to cut all large trees in localities designated by the proper authority. In case of the land owner's failure to do so, this should be done under the direction of the engineer in charge of the river work. There need be no expense attached to this work. The wood would amply repay for the labor of clearing the banks, and the land owner need not be compensated, because an opportunity will have been given him to save the wood, which, if not cut, would be a total loss, by reason of its falling into the river.

The tributaries which Sacramento River receives in this division are the numerous small creeks from the Sierra Nevada and Coast Range foothills, and one large tributary, Stony Creek, from the west, which, at times of flood, for short-time periods, discharges ten thousand cubic

feet of water per second. This creek drains a valley lying between a Coast Range spur and the main mountain range. It has a watershed area of six hundred and seventy square miles, and may be classed as a mountain torrent. Only a small portion of its watershed lies in the snow belt. The rainfall not absorbed by soils drains off rapidly. Its low-water flow is fifty to one hundred cubic feet of water per second, and this sinks in the gravel bed of the stream within a few miles of the point where it breaks through the Buttes into the Sacramento Valley. It rises rapidly after a few days of heavy rainfall, and it falls rapidly. Its spring flow gradually decreases, and it generally fails to reach the Sacramento River after June first. This year its flow past St. John was about two hundred cubic feet per second as late as the middle of July.

The point where Stony Creek enters Sacramento River has arbitrarily been made the terminal point of River Division No. 1, and the commencing point of Division No. 2. There is not, however, any sudden change in the character of the river at this point; but it is the point below which, down to Feather River, no tributaries have a direct inflow into Sacramento River.

The waters of Chico Creek ordinarily flow into Sacramento River, but at flood stages the creek sends some of its water across banks into Little Chico Creek, and into a network of sloughs interwoven with each other in the region along the east bank of the river and south of Chico Creek; and these waters, unlike those which occasionally overtop the river banks further up stream, do not return to the river until the basins into and through which they flow are full, and force a reëntry into the river channel near the mouth of Feather River.

We have no works of a permanent character for the improvement of the navigability of the upper division of the river to recommend at this time. The work to be done should be for temporary betterment, and estimates for the same should be made from year to year by the United States Army engineers in charge of the river.

Nor does the river in this division require special treatment as a drainway, except that all plans for the control of the river's flood waters must make a provision for controlling the overflow waters upon its east bank below Chico Creek, or for confining the same to the river channel.

Col. G. H. Mendell writes of this and the next division of Sacramento River, in 1880, as follows:

The term upper river may be applied to that portion lying above Colusa, which is about one hundred miles in length. This section of the river may be distinguished from that lying below Colusa by the want of permanency in the banks and channel.

While the river below Colusa is, as a whole, between sedimentary banks of sufficient power of resistance, the river above Colusa shifts more or less with every flood, and upon its subsidence the navigable channel is found, in a number of places, to have changed position. In the upper river there are also good banks, but they are not the banks of the river proper. We may imagine them to have been the banks of an ancient river of much larger dimensions than the existing river. The distance between these old banks on the two sides of the river is, at the big cut-off, one and one half miles; and at Sam Soule Bar they approach each other, being two thirds of a mile apart. Here and there, between these limits of width, the river touches one of these banks, and wherever this occurs, we find the villages and permanent landings from which the products of the country are shipped. The hard banks are generally about the level of high water, or a little lower. Between these permanent banks, and lying about five feet below them in height, is the alluvial bottom land, generally covered, where it has been long undisturbed, with a dense growth of sycamores and cottonwoods, with some oaks.

In this bottom land the river excavates a new bed at will—elongates itself in tortuous bends, and shortens itself by frequent cut-offs. In making these changes of channel, it undermines the forests and precipitates them into the river. Some of these trees, particularly the large sycamores, when imbedded in the masses of gravel which the

river moves upon its bed, become most formidable dangers to navigation, and also most difficult of removal. * * *

The difficulties of navigation are mainly due to the changes of the channel. The quantity of water is sufficient, although the depth is often insufficient. The current at the rapids, although very swift, is not an obstacle of the first importance. If the depth is sufficient the boats can overcome the current. A bar having sufficient water this year may be a considerable obstacle next year. The best water may be encumbered with snags. Some of these gravel bars are traveling down stream. A bar near the Chico Ferry has been moving at the rate of about two hundred feet a year for several years. Other obstructions appear to be sensibly permanent. The two most important rapids on the river, which have already been mentioned, Sam Soule's and Tehama, are of this character, permanent as to locality, although subject to considerable variations of channel.

Where the rapids have insufficient depth, the difficulty can be removed by concentrating the low-water discharge. It may be that this concentration will not be able to excavate the bar; in this case greater depth can be gained by raising the level of the water. An increase of velocity results. Some of these bars will probably have to be deepened by artificial means, if deepened at all. The bars in the part of the river now navigated, found to have the least water, were Deadman's and Monroeville, both of gravel, and below Stony Creek the depth was twenty inches. This depth holds, perhaps, for two or three months of low water; Sam Soule Bar has least depth. These bars may all be improved by concentration.

This kind of improvement answers for the season, but next year the bar may have moved down stream, or the channel may have taken a new course in its wide bed, renewing the difficulty at a new point. When the difficulty comes, it shows itself at the very height of the river trade, and, if it is to be remedied in time to be of use, the work must be done promptly.

The following table shows the water in 1879 on different bars between Princeton and Tehama Rapids, a distance of about sixty-five miles. Below the Princeton Bar there is everywhere three feet or more of water:

	Inches.
Princeton, at low-water stage.....	30
Nigger Jones, at low-water stage.....	28
Bee Hive, at low-water stage.....	28
Reillys Landing, at low-water stage.....	30
John Hites, at low-water stage.....	26
Glenn Gardens, at low-water stage.....	24
Parrotts (upper landing), at low-water stage.....	30
Deadman's Bar, at low-water stage.....	21
Monroeville Bar, at low-water stage.....	20
Below Chico Ferry, at low-water stage.....	30
Flora Bend (below Bidwells), at low-water stage.....	24
California Island (below Bidwells), at low-water stage.....	30
Sam Soule Bar (lower end).....	14
Sam Soule Bar (middle bar).....	24
Wilsons Lower Bar.....	20
Wilsons Upper Bar.....	24
Mark Reazers Lower Bar.....	30
Mark Reazers Middle Bar.....	33
Hoodlun Chute.....	30
Eastmans Landing.....	30
Below Gazelle Chute.....	30
Merrills Wheat Landing.....	18
Moores Cut-off.....	20
Mouth of Deer Creek.....	30
Above Deer Creek.....	30
Captain Janes Bar.....	18
Thomas Creek.....	30
Cherkes Chute.....	30

So far as the system is possible, it ought to be directed to improving bars with less than thirty inches, to give at least that depth.

The trade of the upper river is principally the towing of wheat barges, which, fully loaded, carry five hundred or six hundred tons, and draw four or five feet of water. The barge is towed astern of a light-draught steamer, at the end of a long hawser. Below Colusa there is plenty of water, so that the barge usually finishes its load at this point.

The wheat coming from the upper landings is loaded with reference to the depth of water on the bars, so that an improvement in depth at once cheapens transportation. On the other hand, it may be said that the very low water seldom holds more than three months. These are, however, the three months just succeeding the harvest.

A worse enemy to navigation is the abundance of snags. The causes that keep up the supply have been mentioned.

2. STONY CREEK TO BUTTE SLOUGH.

From Stony Creek to Butte Slough the river merits our special attention. Here it becomes apparent that Nature has provided insufficient waterway for the valley flood waters. During times of freshets, there must be a spilling over to the east and to the west. The natural overflow toward the west has been, in a great measure, checked by a continuous line of levee down stream, from near Jacinto throughout this river division, and down the next division as far as Grafton; but toward the east the overflow, already noted as occurring at and below Chico Creek, remains unchecked, and at the lower end of this division the Butte Slough region also affords a copious outfall toward the head of Sutter Basin.

Under our State reclamation laws, which authorize the formation of reclamation districts, or, as some are more recently called, "protection districts," the land owners, by more or less united action, have been enabled to construct levees on or near the river banks, which are intended to prevent the overflow of water across bank lands in front of each particular district which is to be protected by them. These levees, however, when they become continuous embankments on both sides of the river, have the further effect of confining the river's flood waters. Without any increase of flood volume, they must, therefore, increase the water-surface elevations of the river at all stages above those at which the river, in its natural condition, could discharge some of its water across banks. The increased elevation of the water surface from such cause is always accompanied by an increase of the velocity at which the river flows. There may, therefore, if conditions are favorable, erosion take place, the waterway may be deepened, the low-water plane may be lowered, and the capacity of the river may be increased above its original capacity. Under such circumstances, the effect which levees have upon the elevation of the high-water plane may be only temporary.

The lesson taught by the levee work northward from Colusa in this river division is a plain one. As levees have been extended up stream, toward and above Butte City, the volume of water in the river, when it is bank full at Butte City, has in every instance been sufficient to overtop the levees at points further down stream. The river bed has a gravelly bottom. Conditions are not favorable for an increase of waterway by erosion, and the only increase of capacity is directly due to the raising of the water surface by the levees. The levees six to eight feet high cannot confine the water to the river. Levees must break somewhere, and they have done so at every flood stage of the river which filled the river bank full at Butte City. The capacity of the river to pass flood volumes decreases more rapidly from point to point down stream in this division than the maximum flow of the river (by reason of water storage between banks) decreases. The rise of high waters, due to the levee system, is here so marked that the question is often asked, "How high must the levees be to confine the waters to the river channel?" To this question it is impossible to give a definite answer, because, as already explained, the data is lacking on which to base an estimate of the greatest flow which would have to pass any given point, if no water escaped from the river above that point. But we do know that the water which causes a twelve-foot rise at Butte City causes the

river to rise nineteen feet at Colusa, and that the twenty-four-foot rise at Butte City, which would be necessary to cover high bank lands at that point, would require a general height of levee near Colusa of about ten feet to prevent inundation beyond the levee lines. Yet the water which at such stage passes Butte City, falls far short of the amount which would there be presented, if no water could escape from the river channel above that point. No further argument is necessary to demonstrate the insufficiency of this division of Sacramento River as a waterway for flood waters. More figures could be cited to elucidate this fact, but they would necessarily be only approximations and seem superfluous at this time.

In this division the general alignment of the river channel is good, though there are few points where a straightening of the river by the cutting of new channels would result in permanent good. The lines of hardpan banks, which, in the upper section, clearly define the limit of possible change in the channel position, do not seem to be continuous through the second division, nor are they as clearly defined. Abandoned river beds partially filled with silt, sometimes long and straight, at other times in horseshoe form, are found upon both sides of the present channel, generally within a two-mile limit, from end to end of this division. Such are Mud and Packer Lakes, Zip Lake, the long pond southeastward from the Bunker and Goldring place, the O'Sullivan Swag, Wilkins Lake, and other depressions or water holes of like character. It is not surprising, then, that the river, flowing as it does through newly made alluvial soils, has numerous caving banks in this division. The tendency to cut is strong in all concave banks, until checked by a line of hardpan, or until some point of land is cut off.

Here, as in the division above, it would be greatly in the interest of low-water navigability to remove from caving bank lands the large timber which is now growing there. It would be premature to attempt to hold the river to any alignment that might now be selected as desirable, because the cost of doing so would far exceed the advantages that would result from the establishment of a correct alignment.

The levee work that has been done in this division of the river has increased its flow at flood stages, and no doubt has to some extent increased the rate of bank caving. There are points, as in front of Colusa, where interests of considerable magnitude are at stake, and depend for protection upon the maintenance of river bank and river levee in their present position. In such places, work of purely local character becomes necessary, and should be such as to cause no unnecessary interference with navigation interests. If the plans for the same cannot emanate from the United States Army Engineer Corps, which deals with the river only when its navigability is to be improved, then there should be some way prescribed by law for submitting plans of proposed work to that department for its approval or disapproval.

In the upper portions of this division, which has a length of nearly fifty-three miles, the Sacramento River has an average width between banks of about six hundred feet. In the lower half of the division the average width is a little less than four hundred and fifty feet. Bank heights above low water are generally eighteen to twenty-two feet. They are lower than the former figure only in the case of alluvial banks now forming, and exceed the latter only in a few instances where the river infringes on the hardpan rim, as at Jacinto and Butte City. High-bank

land is, with but little variation, at about twenty feet above the low-water plane. Throughout this entire division the water of the river at the low-water stage flows from one deep-water pool, where the slope is very light, to the next pool below across gravel-bar riffles. Occasional shoals form every year in localities where bank erosion is more rapid on one side of the river than bank building upon the other, or where, from other causes, the river has more than average width. The average slope in the upper portions of this division is about twenty inches per mile. It is ten inches per mile in the lower portions. This decrease of slope and of width, as here noted for long sections of the river, more fully establishes the fact that the river channel has less capacity near the lower end of the division, as at Colusa, than it has near the upper end, as at Jacinto and Butte City.

The gravel-bar riffles, which are sometimes obstructions to navigation at the low-water stage, are closer together in the upper portion of the division than further down stream, and it is in that portion of the division that they show the least depth of water. Navigation interests will always require temporary work of a local nature for channel improvement in this part of the river, but no estimate can at this time be made of the future needs of the river in this direction. Whenever long continued caving of river banks produces such alignments of the river channel as below Calls Bend, where in a number of bad reaches the river, with a length of nearly three miles, almost encircles Bee Hive Point (Cox Bend being less than one half mile in an air line from Calls Bend), then it is time to cut through the neck of land to enable the river to change its channel to a direct alignment. The result of such change must be the temporary raising of the high-water plane below the point, and it will also cause a riffle to form above the point; but these effects will be no greater than have resulted from many such changes in the past, and the general regimen of the rest of the river will not be affected thereby.

At the lower end of this division, Butte Slough breaks out from the river, toward the east. This slough has been cut into the firm hardpan of the river bank by the annually recurring overflows from the river channel at this point. It leads from the river southeasterly into and through the depression between the Sutter Buttes and the river bank. Its water mingles with the water draining southerly from Butte Basin into Sutter Basin. The quantity of water which thus reaches Sutter Basin is very great, but its flow is only periodical. The well defined channel of Butte Slough is lost a few miles out from Sacramento River, and its waters spread out in the depression west of the Buttes. The water thus flowing at the base of the Buttes has not had sufficient erosive force to cut and maintain a channel. The frequent and copious irrigation received by the land has produced a rank growth of weeds, brush, and willows, from side to side of the long narrow depression, through which Butte Basin and Butte Slough send their water to Sutter Basin, and this depression, from this cause, and a consequent rapid deposit of silt, is fast deteriorating as a waterway. The flow of water from Butte Basin and the river into Sutter Basin is thus retarded, consequently the flow in the river from Butte Slough to the mouth of Feather River is increased, and the water elevations in Butte Basin are also increased. The consequent high stage of the river at Colusa is a continual menace to the protection works on both sides of the river,

while the massing of water in Butte Basin also increases the danger to all back levees lower down, upon the east side of the river, because a second flood is more liable to find the basin full and unable to check the flood flow, than if a better outlet past the Buttes had drawn off the preceding waters more rapidly. Reclamation District No. 108, upon the west bank of Sacramento River, which embraces the lowest portions of Colusa Basin; Reclamation District No. 70, which lies upon the east side of Sacramento River, south of and adjacent to Butte Slough, and the land owners in or around Butte Basin, are all alike interested in creating and maintaining an ample waterway southward past the Buttes, from Butte Basin to Sutter Basin. The maintenance of an ample waterway at this point does not, necessarily, mean the delivery of more water into Sutter Basin than would go there under the present conditions, but some of the water would reach the basin earlier and would have earlier opportunity to flow into the lower rivers again. Under certain conditions of flood flow this would reduce the flood heights in the lower basin; under other conditions of flood flow, they might be increased; but in either case the effect on the lower sheet of water would be so small that it would be of no practical value to attempt to determine it with precision at this time.

With the character of this river division, as above concisely described, before us, we cannot escape the conviction which we have already expressed, that there are portions of Sacramento River where its capacity is wholly inadequate to carry the waters of an ordinary flood. The channel is too small, being too narrow and not deep enough. The waters which annually overtopped the natural banks before levees were built, dropped silt more rapidly on the immediate river banks than elsewhere. This accounts for the greater elevation of land near the river than that back from the river. But it is not to be forgotten that a stream which thus builds up a valley, is also gradually raising its bed. The rising of the bed is, however, under natural conditions, so slow in the case of all rivers similar to the Sacramento River in the division now under consideration, that it would take observations extending through centuries to establish definitely the rate of such rise. It is not necessary, as has often been done, to attribute a river bed's rising to the building of levees. Moreover, it may be accepted as a positive fact that properly located levees have retarded this rise instead of hastening it. When such building up of banks and river bed has progressed until the river bottom is on a higher plane than the thread of the valley upon either side, then extraordinary floods in one season, or ordinary floods in a succession of seasons, may cut through the rim of bank land and produce a permanent change in the river alignment. When this happens, then channel building begins anew, and each time that the river thus makes a change its waterway will be increased. In the course of ages a silt-bearing river may in this way build up an insubmersible plain, particularly when its tributaries are numerous and silt-laden.

The river channel from Stony Creek to Butte Slough, as a whole, lacks the capacity required to carry floods. Nature's system of relief has been a very simple one. Low banks were overtopped, and adjacent depressions, or flood basins, were filled before water rose sufficiently high to cause general inundation. The flood basins became relief canals, though very imperfect ones. They retarded the progress of flood-waves to the lower rivers, and thereby reduced the flood volume, to be passed

at the height of the flood, for points further down stream. This natural system of relief is referred to because the only rational system of river treatment for the Sacramento is one closely patterned after Nature. It will be necessary to bear in mind, however, that a general spilling of water over low places in the river banks has never wrought injury to the river, such as results from ordinary partition of the river water, as in the case of the opening of a large crevasse in the river bank or the drawing off of a large quantity of water from one point through a relief canal.

The State Engineer, in 1880, wrote of this river division:

Butte Slough, at the lower end of this division, is a large escape channel for the flood waters into the lower end of Butte Basin above it, and the upper end of Sutter Basin below it, on the east side. Attempts have been made to close this slough and keep it closed by means of earthwork embankments and timber structures; but these efforts so far have failed.

The construction of levees, which are generally set back on the hard lands, has for the most part prevented the overflow of waters into Colusa Basin on the west, but the great line of escape into the head of Butte Basin on the east, near its upper end, and into the lower portion of the same basin from near the lower end of the division, is still open to the waters of ordinary high floods, although for many miles the direct overflow eastward is also prevented by levees throughout the middle portion of the division.

3. BUTTE SLOUGH TO FEATHER RIVER.

At the head of this division of Sacramento River the Butte Slough country, as above described, is a relief outlet for the river's flood waters. The quantity of water at low to medium stages of the river which flows into Butte Slough is small, but it increases rapidly after the river rises to a stage above natural bank heights at this point. The quantity of water which here leaves the Sacramento River during ordinary floods, while west-side levees remain intact, far exceeds the flood flow of the river below Butte Slough. From such a great diversion of river water near one point of outflow it would not be unreasonable to expect to find a rapid shoaling just below the slough. But such is not the case. The reduction of the effective waterway in the Sacramento River channel is here so marked that complete adjustment of river dimensions to present conditions of flow seems to have become an established fact. The water passing Butte Slough in the river channel is of sufficient volume to maintain a very uniform waterway throughout this entire division. Here, as in the preceding division, the river receives no tributaries. Bank lands slope from the river sometimes at the rate of ten feet per thousand feet. Colusa Basin lies to the west of that part of this division above Grafton, and Yolo Basin lies south of the river below Grafton. Sutter Basin extends from end to end of this division along the east side of the river.

Before attempts were made to confine flood waters to the river channel by means of levees set close to the edge of the bank lands, the river in this division, as in the division next above, overtopped its banks in times of flood, and these basins were thus always filled, at least to the height of the water surface in the river at their points of reentry into the river. Not only was this the case, but their outlet or drainage channels were points of inflow into the basins during every rise of the river until the water surface in the basin was as great as the water surface in the river at the lower end of each basin. A peculiar difference therefore exists between

these flood basins in their natural condition and flood basins as they would be, if provided under a rational system of river management, for the purpose of retarding the progress of a flood wave and reducing the maximum flood flow of a stream. In their natural condition, water enters the basins at their lower ends and flows up the valley long distances, before the river needs relief, and this water occupies space in the basin, which, under a practical manipulation of a flood-basin system, would be kept available for use until the moment of greatest need has arrived.

The general flooding of lands, which has always resulted along both sides of the river during ordinary floods, before levees were built, and, more recently, whenever levees have been broken, has caused exaggerated ideas of the flow of the Sacramento when in flood to be formed.

Where in its natural condition, the river has often been flanked by inland seas of vast extent before the time of its greatest flow during the passage of a flood wave, a systematic river treatment might have presented a river flowing full but flanked by empty basins ready to receive water in excess of the river's capacity.

In this division, even in the case of many sharp bends, and below Grafton, where the river's alignment is very bad, the banks are firm, and show but little tendency to cave. The river has barely changed its alignment in ten years, and has made no sudden cut-offs in the last thirty years. The river channel has a remarkably uniform cross-section varying between three hundred and eighty feet and two hundred and twenty feet as the greatest and least widths between high-water banks, when averaged for the widest and the narrowest mile of river. Low water, where not affected by the silting of the Sacramento River below the mouth of the Feather River, is everywhere about eighteen to twenty feet below bank heights. Low-water slope, as the river was before the rapid silting of the lower Sacramento River commenced, was six inches per mile, in this division, and ranged between the limits of eight inches and five inches as the greatest and least fall in any one mile. The average channel width in this division (between tops of banks) is two hundred and ninety feet. The river banks are generally yellow clay, or quite firm alluvial deposit; the river bottom is sand.

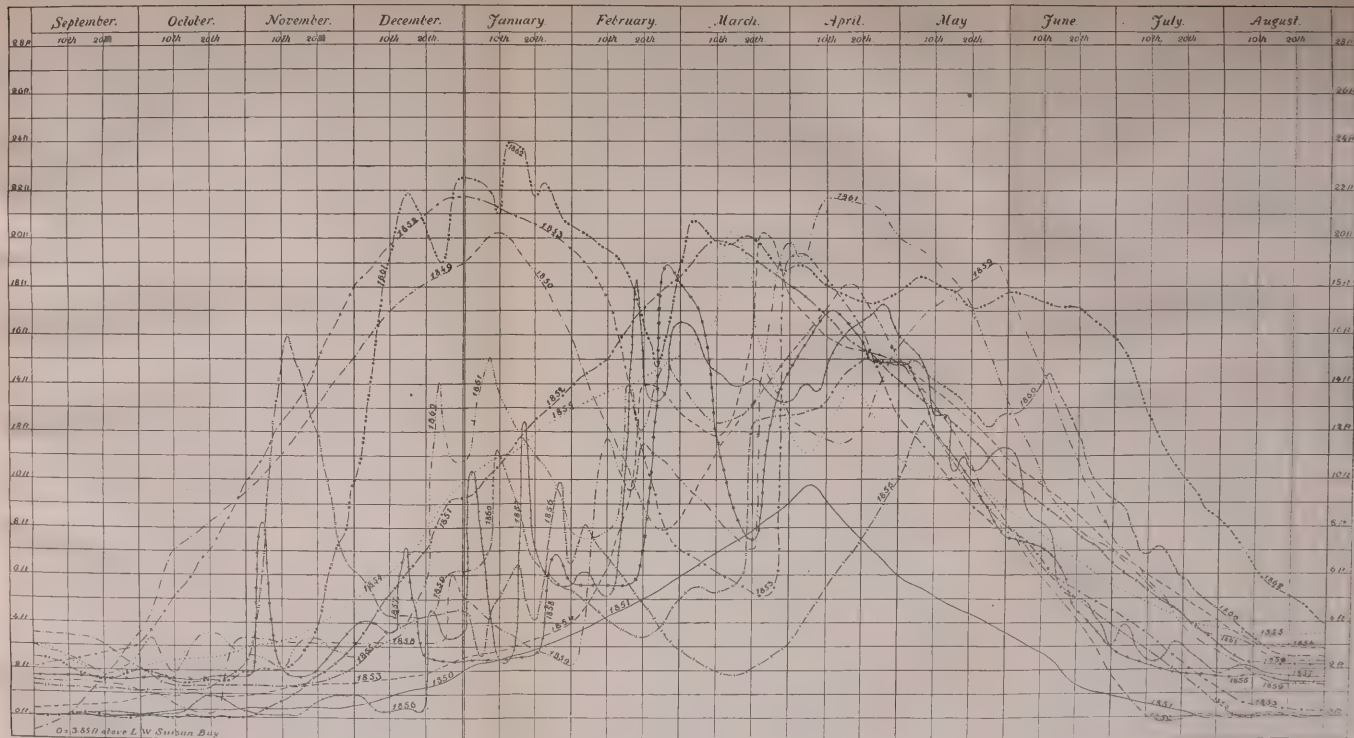
Except in a very few spots, where the river has greater than average width, there are no shoals or riffles in this division. There are very few snags in the river, because there are no caving banks.

Levees have been built on the west side of the river throughout this entire division, and on the east side from Butte Slough to Grafton; thence, across the Sutter Basin to Feather River. The west-side levee has been maintained in reasonably fair condition down to Grafton, below which point its maintenance has been less successful. That upon the east side to Grafton is not in quite as good condition as the levee on the west bank. Below Grafton no effort is made to keep it in repair.

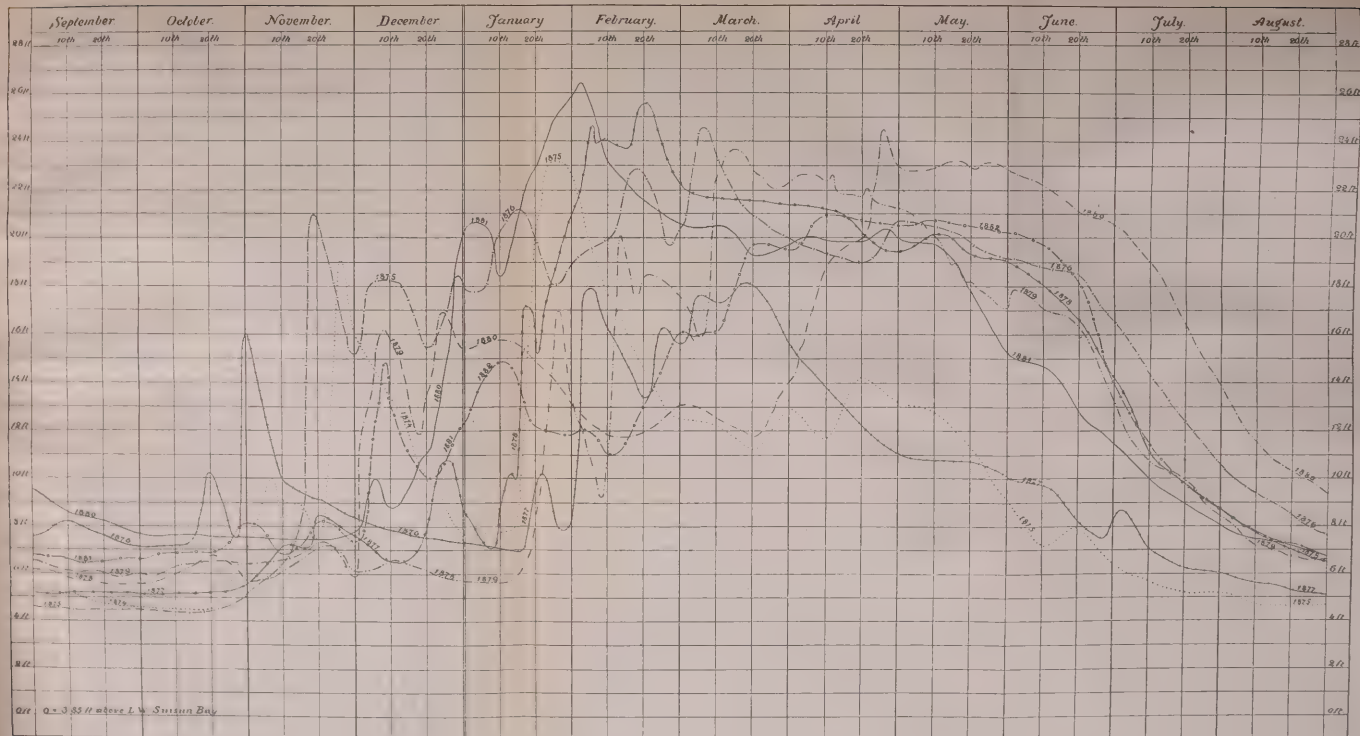
These levees have generally been set close to the river bank, and their height ranges from four to eight feet above banks. They are maintained by the reclamation districts adjacent to the river, or by individual land owners.

The levee system in this division, if levees on both banks from Butte Slough to Grafton were held intact, would increase the capacity of this part of the river from about twenty-five thousand cubic feet per second (river bank full) to about forty thousand cubic feet per second. Even the increased capacity falls far short of the one hundred and fifty thou-

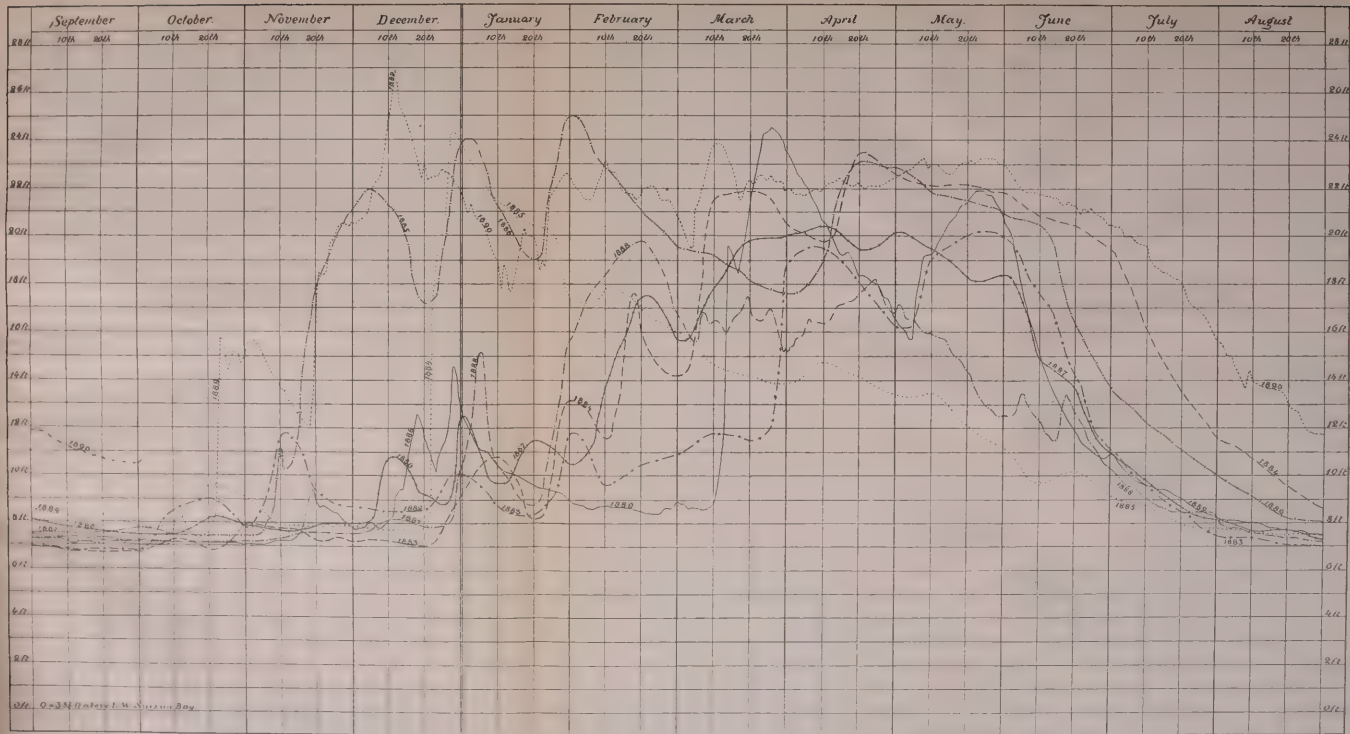
SACRAMENTO RIVER ROD-RECORD AT SACRAMENTO. *September 1849 to August 1862.*



SACRAMENTO RIVER ROD-RECORD AT SACRAMENTO. *September 1874 to August 1882.*



SACRAMENTO RIVER ROD-RECORD AT SACRAMENTO. *September 1882 to October 1890.*



sand cubic feet of water per second which, at a low estimate, would have to be carried by this river division, if there were no easement from the river at points above into the flood basins. Every ordinary flood reasonably well confined to the river by levees above Colusa must, therefore, be expected to fill this river division full to the levee tops unless a sufficient easement be had somewhere in the vicinity of Butte Slough. Even with the relief afforded by this high-water outlet, each succeeding flood has in the past caused the river to rise till levees broke either upon the east or upon the west bank.

An efficient levee system on one side of the river, therefore, means nothing more nor less than one somewhat less efficient on the other side.

In the lower portion of this river division there has been a very decided rise in the low-water plane from 1860 to 1878. This rise, as nearly as can be determined from measurements, which do not date as far back as desirable, was about six feet to 1878, and has been about two feet since that time. The effect of tides at low water extended above the mouth of Feather River before 1860. It was barely perceptible at Sacramento in 1878, and Freeport is at present about the upper limit of the tide. Before 1860 the difference in elevation between low tide and high tide at Sacramento was about two feet.

The rise of the low-water plane at the mouth of the Feather River is the direct result of the silting up of the Sacramento River below this point. Above the mouth of the Feather River there has been no such deposit of silt. There is, therefore, a long pool of almost dead water just above the Feather River, which has its upper end at or above Grafton. Less than average slope is here required to discharge the low-water flow into lower Sacramento River. The low-water gradient is only three inches per mile; it was nearly twice as great in the original condition of the river.

The distance by river from Portuguese Bend, just below Grafton, to the mouth of the Feather River, is about fourteen miles. The distance in an air line between these points is less than four miles. There is no obstacle in the way of changing the alignment of the river from its present very tortuous course to a direct channel. This correction of alignment would benefit navigation interests; it would cause a deepening of the channel above Grafton; it would increase the high-water capacity of the entire river division now under consideration; it would reduce flood heights (for like quantities of water), and it would, therefore, be beneficial to all land and river interests above Grafton.

Referring to that part of this river division above Grafton, the State Engineer, in his report of 1880, says:

Throughout this portion of its course the channel, as compared to that in the division above, is very deficient in capacity. It does not carry on the average more than half the water brought to it in time of ordinary high flood, the remainder escaping through Butte Slough and certain crevasses into Sutter Basin on the east, and occasionally rupturing the levee on the west, in its endeavor to flow into Colusa Basin.

4. MOUTH OF FEATHER RIVER TO HEAD OF GRAND ISLAND.

After flowing for one hundred and seventeen miles without receiving the water of a single tributary, except through outlet channels from flood basins, the Sacramento River is joined by Feather River, whose general course, in a distance of about sixty-seven miles by river, is almost due south from Oroville, the point at which it breaks from the

Sierra Nevada foothills into the valley. At the junction of these rivers the Sacramento suddenly widens from a little over three hundred feet between banks to nearly seven hundred feet. Its average width for twenty miles below the mouth of Feather River is six hundred and eighty feet.

At this point of confluence the lower Sacramento River not only receives Feather River water, but across banks and through outlet sloughs it receives the contents of Sutter Basin. The accession to upper river water is thus very great, and it was great even before attempts to prevent inundation had been made, consequently we note here a radical change in the character of the river, and it becomes a very important question to decide whether the river in this division can be made to carry flood volumes without impracticably high artificial banks or levees.

The river in this division has a length of forty-seven and one half miles. The average width between high banks is six hundred and fifty feet. The greatest average width for any one mile is eight hundred and fifty feet; and the least average width for a mile is four hundred and eighty feet. The average low-water fall in this division of the river is three inches per mile. It is greater in the upper half than in the lower half of the division, being nearly four inches per mile from the Feather River to the American River, and a little over two inches from the American River to Grand Island. Before 1858, that is, before the rapid deposit of silt in the channel of the river had produced any apparent effect on water elevation, the average low-water low-tide slope in this division was less than one half of the present average slope. The low-water plane at Sacramento, the only point for which reliable rod records extending over a sufficiently long period are available, was practically as low in 1850, 1851, 1856, and 1858, as it was in 1849. Since 1858 it rose from year to year, till in 1878 it reached a point five and one half feet above the original ordinary low-water plane at Sacramento. Two years later seven and one half feet above low water of 1849 was the low-water mark at the same place, and for nine years since that time the river's annual low stage has not varied materially from this height above original low water. In this year—1890—two causes have combined to hold the river at a still higher stage—about ten feet—at the time of its low-water flow:

1. Paine Break, the crevasse in the west river levee and river bank, just below Washington, Yolo County, has caused rapid shoaling for several miles below the crevasse, and the reëntry of the enormous volume of water (several times greater than the ordinary flood flow of Sacramento River past Sacramento) at the foot of Grand Island, through Cache Slough, by producing unusually high stages of water at that point, acted as a water-dam for the old Sacramento River and Steamboat Slough, and here, too, caused a deposit of silt which the river, under other circumstances, would have carried on to the bay.

2. The cold winter and cool spring has so retarded the melting of snow that the low-water flow this season exceeded the ordinary low-water flow.

This rise of the low-water plane is not confined to the one point, Sacramento; it is a general rise throughout the entire river below the mouth of Feather River, and, as already explained, for some distance above that point. The direct cause of this rise is the deposit of silt in the river channel, and the consequent reduction of effective waterway. This reduction of waterway is by no means inconsiderable. It is greater than

the entire original low-water channel at Sacramento, as will appear by comparing the soundings made in front of that city in 1854, by City Engineer Watson, with the soundings made at various times since 1878. It is no exaggeration to place the present average height of the river bottom from Feather River to the city of Sacramento three feet above the low-water line of 1849, and about fifteen feet above the average river-bottom line of the same year.

The effective waterway of the river below Feather River, at a bank-full stage, has been reduced fully 40 per cent, and its water-carrying capacity at least 60 per cent for the same water heights.

In the report of Captain A. H. Payson, Corps of Engineers, to the Chief of Engineers, U. S. Army, under date of August 20, 1886, he says:

Sections abreast the city of Sacramento were measured in 1854, and careful record made of these measures, and the location of the sections. The sections were remeasured and comparisons made by the Chief Engineer in 1878, and again, under my instructions, last autumn. The distance covered on the river is about two miles.

The results are remarkable, and give a clear idea of the great change, for the worse, which has taken place in the river below the entrance of the Feather. * * *

LOCALITY.	LOSS IN SECTIONAL AREA— SQUARE FEET.		Area, 1885.
	1854 to 1878.	1878 to 1885.	
Section opposite U Street.....	8,000	3,580	2,970
Section opposite R Street.....	8,070	2,640	3,290
Section opposite N Street.....	11,040	2,760	2,840
Section opposite K Street.....	9,520	3,320	2,700
Section eight hundred and fifty feet above railroad bridge.....	14,980	2,110	2,890
Section eight hundred feet below American River ..	11,970	2,970	2,310

It is well to note in this connection that the above losses in sectional area may be accepted as reliable. The zero of the river rod at Sacramento is the reference place of that city, and has been carefully maintained at its original elevation.

In speaking of California rivers, in his official report in 1882, Col. G. H. Mendell says:

To place this in a more specific light, we may recall that the mining detritus annually placed in the three rivers is quite thirty-one million cubic yards; while the Po rate of denudation applied to the area of the basins would afford little more than six million cubic yards per year.

These general considerations are calculated to convey to the minds of those familiar with the natural circumstances of rivers, as clear a conception of the magnitude of the problem as would be afforded by a study of its details.

They explain the accumulations in the river beds, by making it evident that mining operations contribute more material per year than the floods of that year are able to carry.

It also becomes plain that if the mining were to cease now, the floods being able to transport considerably more material than that due to natural erosion, would then be in a condition to attack deposits in the beds, which are comparatively safe so long as the floods are overloaded as they now are.

The navigable waters are the channels of the Great Bay, and the Feather, Sacramento, and San Joaquin Rivers.

So far as the rivers are concerned, we are not in possession of charts of old date, which, compared with recent maps, would afford an accurate record of the changes that have occurred in the past generation.

Nevertheless, the partial records that exist, and well established facts developed by inquiry, and by comparison of statements made by those who, by reason of occupation or residence, must be supposed to have knowledge of certain facts, are sufficient to enable a fair general comparison to be made of the present and former conditions of the Sacramento River below the entrance into it of mining detritus.

As for the San Joaquin River, no evidence is known to exist showing any change of importance in its channels.

A gauge has been observed at the city of Sacramento with more or less continuity, since and including the year 1849, which was the date of the great influx of people into California.

It may be observed that the low-water plane was raised two and nine tenths feet in the twenty years succeeding the beginning of mining, and that the next ten years, from 1869 to 1879, doubled the rise of the plane.

The table shows a continuous rise, with some anomalies, which may, in part at least, be accounted for by the different volumes of the river in its low stages. The differences in volume may be accounted for by difference in rainfall, and also by the influence due to the amount of water contributed from the storage reservoirs of mining companies.

A local change in the slope of the river may also be due to variations in the amount of detritus deposited in the Sacramento by the American, which joins the main river at Sacramento.

Notwithstanding these variations, the conclusion is plain that the low-water plane at Sacramento has been raised about six feet since 1849.

As a consequence of the elevation of the bed, the tidal influence, which in 1849 extended at least as high as the mouth of the Feather, twenty-five miles above Sacramento, and was quite two feet at Sacramento, is now no longer noticeable above Heacock Shoals, nine miles below Sacramento.

The tide, within the past thirty years, rose on these shoals as much as three feet.

Corroborative evidence of the rise of the bed is afforded at the Russian Embarcadero, ten miles below Sacramento, which, in old times, was three feet out of water in the low stage. In 1878 it was found to be one and one half feet under water, showing a rise of surface of about four and one half feet.

This is confirmed again by the level of the low water of 1852, which was fixed at Greens Ferry, three miles above Courtland, by the level at which the branches of a tree were cut off in that year for the accommodation of the ferry boat. This level is four feet below low water of 1878.

To show the condition of the Sacramento River in front of Sacramento, at its present low-water stage, we have again made an examination of the sections above referred to, and present the results of the soundings in 1854, those of 1878, and those of this year, 1890, in the accompanying diagrams.

These diagrams are particularly valuable for three reasons:

1. They show the rise of the river bottom and of the low-water plane at Sacramento, due to the recent deposits of silt in the river channel.
2. They show the great fill in the river channel that prevailed here, as at all points below Feather River, until in front of Sacramento much of it was suddenly swept out this last winter, immediately after the Paine crevasse occurred (December 12, 1889).
3. They show the extent of erosion in front of Sacramento, due to the rush of water past the city, while the top of the overflow in American Basin was being delivered past Sacramento and out through Paine crevasse into Yolo Basin; and they indicate the result which may be expected to follow a systematic control of river flood waters.

The erosion, which the soundings of December 17, 1889, and of September 27, 1890, indicate as having taken place during the last winter, must not be supposed to extend below the Paine crevasse. Its extent is only from the mouth of American River to this crevasse. Below the crevasse shoaling continued last winter at an increased rate, at least in some portions of that part of the river below Sacramento. This is proven conclusively by the prevailing high stage of this year's low water at Sacramento. With Sacramento River at the usual low-water stage in the upper river and the tributaries but little higher than usual, the water at Sacramento (September 27, 1890) is at 10.5 feet on the rod at the foot of K Street. This is very near the low-water stage for this year, and is to be compared with rod readings of 6.7 feet to 8 feet as the lowest readings in the nine years preceding 1890. This year's high low-water stage could not prevail if there were not some increased

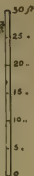
SACRAMENTO RIVER at SACRAMENTO.

R.B.

Cross Section 850 ft above R.R. Bridge.

W.S. Sept 27th 1890
L.W. 1885
L.W. 1878
L.W. 1854
Survey 1854
1878
1890
H.W. Jan 12, 1868
H.W. Feb 21, 1878
H.W. Dec 12, 1889
H.W. Feb 3, 1891

L.B.



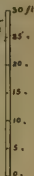
Horizontal Scale:
100 50 100 200 500 ft.

R.B.

Cross Section opposite I Street.

W.S. Sept 27th 1890
L.W. 1885
L.W. 1878
L.W. 1854
Survey 1854
1878
1890
H.W. Jan 12, 1868
H.W. Feb 21, 1878
H.W. Dec 12, 1889
H.W. Feb 3, 1891

L.B.

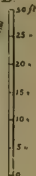


R.B.

Cross Section opposite K Street.

W.S. Sept 27th 1890
L.W. 1885
L.W. 1878
L.W. 1854
Survey 1854
1878
1890
H.W. Jan 12, 1868
H.W. Feb 21, 1878
H.W. Dec 12, 1889
H.W. Feb 3, 1891

L.B.



SACRAMENTO RIVER at SACRAMENTO.



obstruction in Sacramento River below Sacramento, in the form of silt deposits, that prevent the falling of water to about the usual low-water plane.

The soundings in front of Sacramento serve as a reliable basis for approximating the reduction of the waterway throughout the distance from Sacramento to the head of Grand Island. This must be nearly as great as that which the sections indicate as having prevailed near Sacramento in 1885, or about 50 per cent of the original waterway at a bank-full stage. The deposits in the river channel above American River to the mouth of Feather River have not been much less than those below American River, and it is, therefore, safe to estimate the reduction for the entire river division from the mouth of Feather River to the head of Grand Island at 40 per cent of the original waterway, as elsewhere noted.

It is not without interest to know that within a few days after Paine crevasse became the escapeway for Sacramento River water into Yolo Basin, over two million cubic yards of sand were cut out of the river bed in a distance of only two miles below the mouth of American River, and that about one half of this material must have been swept through the crevasse into Yolo Basin, while the rest was dropped again in the river, particularly throughout the long straight reaches next below the crevasse.

The bank heights in this division of the river decrease from about eighteen feet above the original low-water plane of 1849, at the mouth of the Feather River, to about fifteen feet at the head of Grand Island. The bank heights are eighteen to twenty feet near Sacramento, where rapid bank building was due to the inflow of the American River. As in the case of the second and third upper river divisions, the bank land slopes from the river into depressions upon either side. To the east is the American Basin, which extends from near Nicolaus, on the Feather River, to the American River. Further south is Sacramento Basin, below Sacramento, which is narrow at Suttersville; thence rapidly widens and extends to Tyler Slough and the Mokelumne River on the south and southeast. To the west of this division of the river lies Yolo Basin, already referred to as being south of that part of the Sacramento River between Grafton and the mouth of the Feather. It extends southward parallel to the river till encompassed by high land on the west and south; its waters are returned to the Sacramento at the foot of Grand Island.

The only tributary which flows into the river in this division is the American River, which, like the Feather, is heavily laden with silt. This river falls about one hundred feet in its course of twenty-seven miles from the point where it breaks from its cañon to its junction with the Sacramento, and it partakes of the nature of a mountain torrent. Its low-water flow is comparatively small; its floods are of short duration. In times of flood it delivers a very great amount of sand into the Sacramento.

There is no levee on the north bank of the American River, and its waters at high stages of the Sacramento are in part delivered across banks into American Basin, toward the north, and thence flow westward to the Sacramento. To the south of American River the Sacramento levee system is a barrier to the southward flow of American River flood waters into Sacramento Basin.

The levees along Sacramento River, on both sides from Feather River to Grand Island, are, with but little exception, very insignificant affairs, and have been kept in poor repair. Those in best condition are south of American River, belonging to the Sacramento City levee system, and thence down the river. Near Brighton, the levee ends at high land with an elevation of about eight feet above the highest flood water of American River.

Thence to Sacramento the average height of the levee is ten feet; its great width of crown and base, and its well protected slope toward the river, justify the people of Sacramento in feeling reasonably secure behind it.

Southward from Sacramento the levees have repeatedly withstood flood waters which rose more than six feet above natural banks, but they can hardly be called safe at such elevations of the water surface. The last break in the east bank levee south of Sacramento occurred in February, 1878 (Lovdal's break), when the rod at Sacramento indicated twenty-six feet.

Above the American River, on the east bank of the Sacramento River, little or no attempt is made to confine the water to the river channel. In the levee built here some fifteen to twenty years ago, there are now many crevasses, some of which have remained open for ten years or more.

The west-side levee is in somewhat better condition, but it is well known to those who live behind it, that it is inadequate. The only endeavor of land owners seems to be to keep a little in advance of their neighbors in the matter of height of levee, in order that the first rise of the river, if it be a sudden one, may overtop their neighbor's levee, and, breaking there, spare their own. Consequently, it is here the rule to find earth piled up as high as it will stand. The well built, properly located levee is the exception. Insufficient as these west-side levees are, they have occasionally held long enough to cause unusually high stages of water at Sacramento and other points in this river division. In 1881, the river rose till it overtopped this levee at many points. In December, 1889, when the first rise of the winter was a considerable one, they held until the water at Sacramento covered the railroad tracks on Front Street, and registered twenty-six feet eleven and one half inches on the river rod. While the river levees hold as they did at that time, with flood waters still accumulating from the north and east, there are about thirty-nine billion cubic feet of water in Sutter Basin, and about twenty-five billion cubic feet in American Basin. The water from these two vast inland seas, having a combined surface area of ten billion six hundred million square feet, or three hundred and eighty square miles, is discharged across banks into Sacramento River, and its surface must be lowered by a falling river. The consequence is that a crevasse in a levee, if so situated that it has a comparatively free outfall into Yolo Basin, may carry off a volume of water far in excess of the ordinary flow of the river. In this fact is a perfectly natural, easily understood explanation of the peculiar phenomenon of unusually great water elevations at and near the foot of Grand Island, when breaks occur in west-side levees, at a very high stage of the river near or above the mouth of the American.

It is particularly noteworthy that, in this section of the river, the river bottom is composed entirely of silt in which sand predominates. This is being transported toward the river mouth at a rate varying with the

changing flow of the river. The aggregate quantity of sand in the entire division varies from time to time. It must increase when the silt-bearing Feather and American Rivers bring to the Sacramento more sand than the waters of the Sacramento, which flow on a much lighter grade than either of the former, can carry, and it decreases when the inflow of sand is less than the transporting power of the latter. It is impossible to make an accurate estimate of the volume of the sand which the river does actually deliver into Suisun Bay each season. It is sufficient to know that this volume is very large. Observations at Sacramento City indicate frequent changes over long reaches of the river of five feet or more in general elevation. During the river's high stages the sands, by vibration, sometimes become almost like semi-liquids. A great mass of sand, by some disturbance in the uniformity of the river's flow, may be picked up from the river bottom and be held for a time in suspension as a cloud of dust is held in the air, to be immediately dropped again a little further down stream. Rapid changes of this kind cause the phenomena known as "boils," which are here of frequent occurrence, and which always indicate a much finer grade of silt in the river bed than that which the velocity of the current would indicate. Uniform elevation of river bottom from bank to bank is the rule in all straight reaches of this part of the river. Great depths in concave banks, and sandbars on the convex points, are no less frequent here than in all streams receiving excessive amounts of sand to transport.

During a high-water stage in February and March, 1879, soundings were made day after day throughout a portion of the river where its channel was very nearly straight, just below Freeport, by the State Engineer Department. Of the results of their work we read in the report of the State Engineer:

At Freeport, fourteen miles below Sacramento, where the river was sounded and resounded fourteen times in one cross-section, carefully, over the same spots, during the highest freshet of the season, changes in mean depth of 1.5 feet in twenty-four hours were frequent and the rule, while on one occasion the mean depth in one cross-section varied 2.64 feet, with a maximum variation for about one hundred feet of the width of 6.5 feet in depth. And from the cross-sectional measurements of the streams, it has been found that where the waters, which are now confined below the mouth of American and above Grand Island in one channel, pass between banks about four hundred and fifty feet apart, their mean depth is twelve feet below the low-water line of 1878, as against a depth of 4.8 feet in widths of nine hundred feet, and that during floods the tendency is to raise the bottom in the wide reaches, and scour it out in those of average width and in the narrow places, when scouring is going on at all.

Here is the evidence of the ability of the current to restore the channel and make it better than ever, if it had the opportunity—if it were freed from the loads of sand constantly coming from above, and had its channel bars removed by proper treatment. It would be useless to prolong this report by the citation of many facts as to the nature and extent of this class of phenomena observed during the past season; suffice it to say, that certain primary practical conclusions of fact are had.

In the mouth of the American a sandbar was found under the north bank of the channel, at the low stage in 1878. The low-water flow was along the south bank. During the rise of the river this bar was swept out, and while the river stood for months over banks, in the spring of 1879 a new deposit of material was made almost horizontal from bank to bank. Through this deposit the falling river cut a channel along the north bank, and no trace of the channel of 1878 was left. It was estimated that the one change evidenced by these observations represented a delivery of over three hundred and forty thousand cubic yards of silt into Sacramento River, aside from that which was steadily poured in during the entire time that the American River flowed between banks.

These facts can lead to but one conclusion, and that is, that the rivers have a very great scouring capacity, and that they would deepen their channels if the quantity of silt entering them were sufficient to replace that which is annually moved.

The fact that the low-water plane of the Sacramento River has not risen materially in the nine years preceding 1890, seems to indicate that the equilibrium between the quantity of silt entering the Sacramento and the transporting power of the river had very nearly been restored.

It is evident, therefore, that in this river division it becomes very desirable to confine as much water as possible to the river channel. None should escape unnecessarily. The high-water elevations in the channel should be increased as much as can be done with safety. But, above all things, every possible precaution should be taken to keep inflowing silt at a minimum.

At or near the end of this river division, the delta formation of the Sacramento River commences. Sutter Slough is the first natural relief outlet in the right bank of the river, which maintains a continuous channel to a reunion with Steamboat Slough. The head of this slough is open, and a small amount of water flows in it. It is of but little importance as a waterway.

5. HEAD OF GRAND ISLAND TO FOOT OF GRAND ISLAND.

In this division Sacramento River flows in two channels. It separates into these at the head of Grand Island, the main stream flowing southwesterly in a long straight reach for six miles, thence southerly and southwesterly twelve miles to a reunion with the Steamboat Slough branch, which flows in a very direct course along the western side of Grand Island. Steamboat Slough is nearly twelve miles long.

When the Sacramento was first navigated, fewer obstructions to navigation were encountered in Steamboat Slough than by way of Old Sacramento River, as the other branch is called. For many years the slough was, therefore, the preferred channel by navigators, but there was a gradual improvement in the condition of Old Sacramento River; relatively, more water seemed to flow in that channel from year to year, and it is now the main stream. This change in relative navigability is no doubt to some extent due to erosion along the course of Old River, as well as to continued shoaling in Steamboat Slough. The famous Hog's Back in the latter has, however, always been there, and will remain until proper steps are taken to make Steamboat Slough what it should be, the main channel of the river.

Old Sacramento River to Walnut Grove, at the head of Georgiana Slough, has very uniform dimensions. The average width of this part of the river is four hundred feet. Banks are firm and show very little tendency to cave. The combined waterway of Old Sacramento River and upper Steamboat Slough is barely as great as the waterway of Sacramento River above the point of separation, when the river is bank full. The two channels together have less capacity than the single channel above, and a greater slope of the water surface is required to force water through them when the Sacramento is in flood. This condition points to the immediate necessity for improvement at this point. Steamboat Slough should be made the principal waterway, with a capacity at least as great as that of Sacramento River above Grand Island.

Steamboat Slough breaks out from the right bank of Sacramento River almost at right angles. It has a width between banks of about two hundred feet for a distance of four miles, thence it is wider, averaging about four hundred and fifty feet to its mouth. At the point where its width increases, Sutter Slough reënters from the west. Below this point its alignment is good; its width is variable, ranging from about four hundred to six hundred feet. In the wide places are shoals, of which the most noted is Hog's Back. According to the testimony of some of the earliest navigators of this arm of the river, Hog's Back is not a shoal of recent formation, although upon it, as throughout the rest of the lower rivers, deposits have no doubt been made in excess of the amount which the water surface has risen above the original low-water plane.

Recent excavations for material with which to build levee on Grand Island have disclosed the hulk of a barque, deeply imbedded in the river silt. This wreck lies in the river, on or just below the shoal, as it was found in 1854. It was in that year that the barque grounded, and as it filled with water it sank deep into the river bed. The filling about it is, in part only, a recent fill.

Colonel G. H. Mendell, in 1882, in his official report, says:

Twenty-five miles below Sacramento the river divides into two delta channels, which unite below, the intermediate distance by the two channels being eighteen miles by Old River, and twelve miles by Steamboat Slough.

In the earlier days of navigation, and until six or eight years ago, Steamboat Slough was the channel used by all boats and vessels. It is now obstructed by shoals, and at low tide carries only about four feet, so that its navigation is now, for the most part, abandoned.

While Steamboat Slough was the preferred channel for navigation, several attempts to correct the alignment of the banks at the Hog's Back Shoals were made, but the work was not effective. The effort to accomplish a channel correction was not sufficiently well sustained.

Above the mouth of Sutter Slough there are levees on both banks of Steamboat Slough—a high, well constructed levee on the Grand Island side, which extends to the lower end of the island, and one of less height upon the Sutter Island bank.

Below Sutter Slough the right or west bank of Steamboat Slough (also called Merritt Slough in this part of its course) is without a levee. Here, at high stages, the Yolo Basin water plays freely across the tule-covered bank of the slough, and the current in the slough is barely perceptible. But even at stages below bank heights this part of the slough has always had greater capacity than its feeders, upper Steamboat and Sutter Sloughs, of which the latter has an average width of about one hundred and fifty feet between high banks; and from this cause alone a gradual reduction of waterway, when the Sacramento River became a heavy silt-bearing stream, must have resulted.

Within a few hundred feet of the point where Steamboat Slough reunites with Old Sacramento River, it is joined from the west by Cache Slough (not to be confounded with Cache Creek), which is the outlet channel of Yolo Basin, and is fed by a number of sloughs whose branches ramify through the lower portion of that flood basin. It is at this point that all water which reaches Yolo Basin by reason of breaks below the mouth of Feather River in the west-bank levees, or across banks south of the river between Knights Landing and the mouth of

Feather River, or through Cache and Putah Creeks, and other Coast Range drainage channels, forces an entrance into Sacramento River by passing between the high land on the west and the Grand Island levees on the east.

The barrier which prevents the onward flow of the water on the west side of the river to a direct entry into Suisun Bay is the low range of hills, a spur of the Coast Range, which here projects far to the southward, and which breaks off toward the river from the west at Rio Vista, and again from the north at Tolands Landing. These Montezuma Hills which thus crowd Sacramento River to the south, are connected with the main Coast Range by a mere swell in the ground, quite low in the pass through which it has so often been proposed to cut a canal for the Yolo Basin waters. From high tide to high tide in a direct line across this gap in the hills is only about six and one half miles, and the highest point thereof has an elevation of only forty feet above low tide in the bay.

From the main channel of the river in this division, at about six and one half miles below the head of Grand Island, Georgiana Slough breaks out toward the southeast and south, forming a connecting channel from Sacramento River to Mokelumne River and San Joaquin River. Before closed by reclamation works, Tyler Slough was another connecting link between the waters of Georgiana Slough and Mokelumne River. About nine miles below the head of Georgiana Slough is the head of Jackson Slough, now closed by a dam which forms a part of the Andrus and Brannan Island reclamation works, and besides these sloughs, there were other channels with heads close by Sacramento River that collected the overflow water from the left bank of Sacramento River and carried it toward San Joaquin River.

An examination of Georgiana Slough was made by Lieut. A. H. Payson, Corps of Engineers, U. S. Army, in June, 1879. In reporting the results of this examination, he says:

Six miles below its head, Old Sacramento River throws off a branch called Georgiana Slough; this latter, though making many sharp bends, flows in a general southwesterly direction, parallel to and at an average distance of much less than one mile from Old River, for about nine miles; there it bends abruptly to the east, runs almost directly away from Old River, and empties into the Mokelumne, nearly at the junction of the north and south forks of that stream. * * *

At the head of the slough on Old River, its width is between one hundred and one hundred and thirty feet. The banks on both sides are a stiff clay, about four feet above low water, and surmounted by a levee five to six feet higher. The depth is about twenty feet at low water in midchannel, and the banks under water, seemingly, nearly vertical, soundings of from ten to fifteen feet being found within five feet of them. * * *

The entire length of the slough is about twelve miles. For the first nine or nine and one half miles of its length, there can be no possible doubt about there being ample water at all seasons of the year, the only obstructions being snags and overhanging trees; for the last two and one half or three miles the snags and trees disappear, and the depth of water becomes the question. * * *

Formerly a line of steamers ran regularly through it between Sacramento and Stockton.

6. FOOT OF GRAND ISLAND TO COLLINSVILLE.

It has already been stated that the tendency of the Sacramento River at its mouth is strong in the direction of land building. Mud banks are formed, they rise above the low-water surface, tule takes root, a connection with the main land is established, and the river has a new bank line. This transformation of portions of the river-bed bottom into bank lands is not by any means a rapid process. Changes made in ten years

are barely sufficient to be detected without the aid of reference charts. But this reduction of waterway is, nevertheless, a fact, and must continue in the silt-bearing Sacramento until the adjustment to the reduced volume of flow, due to a reduction of the tidal basin, is complete. Not only has this transformation been slowly progressing, but the river, at its high stages, has had to transport to the bay much more silt than its water could move without a change of regimen. It is in this section of the river that the floating bars are sometimes observed. These floating bars are waves of sand moving as a sand dune is moved by the wind, but more rapidly, the material on the back of the wave being constantly impelled forward and over the crest of the wave to find lodgment at its toe, and remain deeply buried, while all the rest of the sand in the floating bar rolls over the spot. Where this phenomenon occurs there is always more silt being brought into the stream than can be moved by the aggregate of its powers of transportation, or the difference in the volume of flow at low and high stages is so great that the sand massed in the bed during the low and medium stages, is stirred into faster motion when the river is in flood.

The tendency of the light sands forming the bed of the Sacramento River is strong to form a horizontal deposit from bank to bank. When wet, the sand is very much like a coarse quicksand; it is almost semiliquid, and inequalities in the river bed are fast obliterated by the quickly shifting masses of sand, except when a current of greater than the average force, as in the case of eddies in concave banks, prevents the deposit in some particular spot.

The rapid motion of great masses of the sand, as above alluded to, together with the fact that the river's width in this division varies from seven hundred to two thousand one hundred feet, affords an explanation of the existence of the shoals in the wide river reaches, as at Newton, just above Rio Vista. In the interest of drainage, as well as navigation, this division of the river should be corrected in alignment with special attention to the establishment of a channel of uniform width.

In strong contrast with the condition of Sacramento River on the shoals, is that at the narrowest part of this division, opposite Horseshoe Point, just above Emmaton, where the current sets against the Sherman Island shore with great force. Shoal water here extends far out into the river from the right bank, while, at the left bank, the water is fifty to seventy feet in depth.

The river banks in this river division are low, composed of sediment-land, as it is generally called, but with enough peat entering into its composition to make it non-erosive. The banks are, therefore, firm, and not liable to change, except where they have been extended by a deposit of new material.

A notable feature of this river division is the connection which exists between Sacramento River and San Joaquin River below Rio Vista, at the head of Sherman Island, where Three-Mile Slough, a channel three hundred to five hundred feet in width, connects the two streams, and serves as an equalizer between the two channels.

The slough is so far down on the main river that it is not effective as a relief from Sacramento River. It is of but little importance as a navigable channel, and adds to the silt deposit in the San Joaquin River at high stages of the Sacramento, by carrying the muddier water of the latter stream into the former.

From data collected by the State Engineer Department, in the years 1878 to 1880, and from the annual reports of the United States Army engineers, the following tables of distances, elevations, grades, and widths have been compiled:

SACRAMENTO RIVER.

DISTANCES.

LOCATION.	DISTANCE FROM NEW YORK LANDING.		DISTANCE FROM STATION TO STATION.	
	Feet.	Miles.	Feet.	Miles.
New York Landing (mouth of river).....	0	0		
Collinsville	16,650	2.964	15,650	2.964
Tolands Landing	49,500	9.375	33,850	6.411
Emmerton	55,700	10.549	6,200	1.174
Three-Mile Slough	70,000	13.257	14,300	2.708
Zeiles Landing	77,300	14.640	7,300	1.383
Rio Vista	88,550	16.771	11,250	2.131
Foot of Grand Island	99,000	18.750	10,450	1.979
Isleton	116,250	22.017	17,250	3.267
Walnut Grove (head of Georgiana Slough).....	164,750	31.203	48,500	9.186
Kerchevals (head of Steamboat Slough).....	195,500	37.027	30,750	5.824
Head of Sutter Slough	204,000	38.636	8,500	1.609
Courtland	206,500	39.110	2,500	0.474
Richland	227,700	43.125	21,200	4.015
Clarksburg	246,675	46.719	18,975	3.594
Davis Brickyard	265,650	50.313	18,975	3.594
Freeport	270,000	51.136	4,350	0.823
Halfway	273,375	51.776	3,375	0.640
Millas	281,100	53.239	7,725	1.463
Haycock Shoals	285,450	54.063	4,350	0.824
Du Boses	295,700	56.004	10,250	1.941
Riverside	308,100	58.352	12,400	2.348
Sutterville Ferry	319,900	60.589	11,800	2.237
Sacramento (foot of K Street).....	336,450	63.722	16,550	3.133
Mouth of American River	341,800	64.735	5,350	1.013
Mouth of Brannan Slough	343,000	64.943	1,200	0.208
Brytes Bend	355,800	67.387	12,800	2.444
Six-Mile Bar (upper end).....	366,400	69.394	10,600	2.007
Monument	379,000	71.781	12,600	2.387
Ten-Mile Shoals (lower end).....	382,200	72.387	3,200	0.606
Ten-Mile Shoals (upper end).....	393,540	74.535	11,340	2.148
Elkhorn Ranch	400,100	75.777	6,560	1.242
Jacobs Break (upper end).....	411,800	77.993	11,700	2.216
Gray & Shaws	423,500	80.209	11,700	2.216
Browns Break	433,800	82.160	10,300	1.951
Gibsons	439,680	83.264	5,830	1.104
Mouth of Feather River	446,050	84.480	6,420	1.216
Grays Bend	486,300	92.103	40,250	7.623
Portuguese Bend, at point.....	513,800	97.311	27,500	5.208
Knights Landing	522,200	98.902	8,400	1.591
Mouth of Sycamore Slough	524,100	99.261	11,900	0.359
D. C. Riels (Victor Bend).....	556,200	105.341	32,100	6.080
Rackerbys	576,450	109.176	20,250	3.835
Moorees	584,780	110.754	8,330	1.578
Kirkville (Ministerial Bend).....	605,050	114.593	20,270	3.839
Winns Landing	633,300	119.943	28,250	5.350
Steiner Bend	664,800	125.720	31,500	5.777
Wilkins Slough	675,770	127.987	10,970	2.267
Eddys Landing	709,530	134.381	33,760	6.394
Grimes Landing	717,330	135.858	7,800	1.477
Grand Island Mills	746,500	141.382	29,170	5.524
Sycamore	754,000	142.803	7,500	1.421
Meridian	763,300	144.565	9,300	1.762
Moons Ferry	783,640	148.417	20,340	3.852
Butte Slough	787,100	149.072	3,460	0.655
Colusa	817,200	154.773	30,100	5.701
Cobbs Bend	831,300	157.443	14,100	2.670
Hamilton Bend	852,800	161.511	21,500	4.068
Seven-Mile House	868,800	164.545	16,000	3.034
Caldens Landing (Murdock).....	884,100	167.443	15,300	2.898

SACRAMENTO RIVER—Continued.

LOCATION.	DISTANCE FROM NEW YORK LANDING.		DISTANCE FROM STATION TO STATION.	
	Feet.	Miles.	Feet.	Miles.
Moultons Landing.....	887,800	168.144	3,700	0.701
J. Boggs Landing.....	905,800	171.553	18,000	3.409
Princeton.....	924,800	175.152	19,000	3.599
Butte City.....	949,960	179.917	25,160	4.765
Foot of Pikes Cut-off.....	978,700	185.359	28,740	5.442
Head of Pikes Cut-off.....	987,700	187.064	9,000	1.705
Jacinto.....	1,011,400	191.553	23,700	4.489
Deadman's Bar.....	1,035,600	196.136	24,200	4.583
Monroeville.....	1,061,800	201.098	26,200	4.962
Mouth of Stony Creek.....	1,065,800	201.856	4,000	0.758
Chico Landing.....	1,086,200	206.023	20,400	4.167
Bidwells Landing.....	1,111,600	210.530	25,400	4.507
Swifts Point Warehouse (Colbys Ferry).....	1,140,600	216.023	29,000	5.493
Foot of Sam Soule Bar.....	1,144,600	216.78	4,000	0.76
Head of Sam Soule Bar.....	1,148,600	217.54	4,000	0.76
Hoodlum Chute.....	1,171,600	221.89	23,000	4.35
Head of Gazelle Chute.....	1,186,600	224.74	15,000	2.85
Merrills Landing.....	1,199,600	227.19	13,000	2.45
Squaw Hill.....	1,213,600	229.85	14,000	2.66
Head of Captain Janes Rapids.....	1,233,300	233.58	29,700	3.73
Foot of Tehama Rapids.....	1,251,300	237.00	18,000	3.42
Head of Tehama Rapids.....	1,255,300	237.75	4,000	0.75
Tehama.....	1,267,300	240.02	2,000	2.27
Foot of Sawmill Rapids.....	1,278,300	242.10	11,000	2.08
Sacramento Bar.....	1,301,300	246.46	23,000	4.36
Last Chance.....	1,330,500	251.90	29,200	5.53
Red Bluff.....	1,347,500	255.02	17,000	3.03
State Engineer Department Gauging Station of 1878, below Iron Cañon.....	1,374,500	260.14	27,000	5.12
<i>Via Steamboat Slough.</i>				
Foot of Grand Island.....	99,000	18.750	3,000	0.568
Mouth of Cache Slough.....	102,000	19.318	17,000	3.220
Hog's Back.....	119,000	22.538	6,600	1.250
Walkers Landing.....	125,600	23.788	13,700	2.594
Mouth of Sutter Slough.....	139,300	26.382	1,050	0.199
Bogles Landing.....	140,350	26.581	21,350	4.044
Head of Grand Island.....	161,700	30.625		

SACRAMENTO RIVER, BELOW SACRAMENTO.

LOW-WATER ELEVATIONS AND GRADES.

LOCATION.	Low Tide.			High Tide.		
	Elevation Low Tide above Base—Feet	Elevation High Tide above Base—Feet	Difference between High and Low Tide—Feet	Difference in Time between Stations	Rate of Propagation of Tidal Wave, Station to Station—Miles per Hour	Difference in Elevation of Low Tide, Station to Station—Feet
New York Landing	0.00	7.35	7.35			0.051
Collinsville	0.15	7.32	7.17			0.062
Tolands	0.55	7.25	6.70			0.011
Emmaton	0.62	7.24	6.62			0.002
Three-Mile Slough	0.99	7.21	6.42			0.002
Rio Vista	1.01	6.92	5.91			0.016
Foot of Grand Island	1.13	6.92	5.79			0.000
<i>Via Old River.</i>						
Foot of Grand Island	1.13	6.92	5.79			+0.053
Isleton	3.99	7.58	3.59			+0.053
Walnut Grove	4.66	7.89	3.23			
Kerchevals						
<i>Main River.</i>						
Kerchevals	4.66	7.89	3.25			-0.0082
Courtland	5.00	7.80	2.80			+0.0062
Richland	5.20	7.93	2.73			-0.0021
Clarksburg	5.49	7.89	2.40			+0.0021
Davis Brickyard	6.11	7.85	1.74			-0.011
Halfway	6.52	7.98	1.46			-0.0175
Millas	7.03	8.12	1.09			+0.092
Haycock Shoals	7.40	8.45	1.05			-0.092
Du Boses	7.79	8.67	0.88			-0.401
Sacramento	9.35	9.55	0.20			+0.114

Via Steamboat Slough.

Foot of Grand Island	1.13	6.92	4.69		1.68	0.084	0.444	+0.58	+0.029	+0.153
Hog's Back	2.81	7.50	4.69		0.31	0.0475	0.251	+0.04	+0.0066	+0.035
Walkers	3.12	7.54	4.42		0.70	0.0475	0.251	+0.10	+0.0066	+0.035
Bogles	3.82	7.64	3.82	1 ^h 05 ^m	0.84	0.0393	0.208	+0.25	+0.0115	+0.061
Kerchevals	4.66	7.89	3.23	0 ^h 50 ^m						

SACRAMENTO RIVER, BELOW SACRAMENTO.

HIGH WATER OF 1879, ELEVATIONS AND GRADES.

LOCATION.	Elevation of Low Tide above Base—Feet	Elevation of High Tide above Base—Feet	Difference between High and Low Tide—Feet	Low Tide.			High Tide.		
				Difference in Ele- vation of Low Tide, Station to Station—Feet....	Fall or Slope per Thousand	Fall or Slope per Mile—Feet	Difference in Ele- vation of High Tide, Station to Station—Feet....	Fall or Slope per Thousand	Grade per Mile— Feet
New York Landing	1.30	7.50	6.20	1.28	0.0821	0.434	0.36	0.0230	0.122
Collinsville	2.58	7.86	5.28	2.78	0.0821	0.434	0.78	0.0230	0.122
Tolands	5.36	8.64	3.28	0.34	0.0556	0.234	0.15	0.0232	0.128
Emmation	5.70	8.79	3.09	0.80	0.0556	0.294	0.03	0.0021	0.011
Three-Mile Slough	6.50	8.82	2.32	2.07	0.116	0.589	0.95	0.0512	0.270
Rio Vista	8.57	9.77	1.20	0.85	0.0813	0.430	0.51	0.0488	0.258
Foot of Grand Island	9.42	10.28	0.86						
<i>Via Old River.</i>									
Foot of Grand Island	9.42	10.28	0.86				0.40	0.0232	0.122
Isleton		10.68					2.94	0.0606	0.320
Walnut Grove		13.62					2.53	0.0823	0.434
Kerchevals		16.15							
<i>Main River.</i>									
Kerchevals	16.15	16.15					0.17	0.0155	0.082
Courtland	16.32	16.32					1.65	0.0778	0.411
Richland	17.97	17.97					1.61	0.0848	0.448
Clarksburg	19.58	19.58					1.03	0.0543	0.287
Davis Brickyard	20.61	20.61					0.69	0.0893	0.472
Halfway	21.30	21.30					0.56	0.0725	0.383
Millas	21.86	21.86					0.61	0.1402	0.704
Haycock Shoals	22.47	22.47					1.03	0.1005	0.531
Du Boses	23.50	23.50					3.77	0.0925	0.489
Sacramento	27.27	27.27							

<i>Via Steamboat Slough.</i>									
Foot of Grand Island	9.42	10.28	0.86	2.08	0.1040	0.549	1.22	0.0610	0.322
Hog's Back	11.50	11.50	0.00	-----	-----	-----	0.09	0.0186	0.072
Walkers	11.59	11.59	0.00	-----	-----	-----	1.10	-0.0746	0.394
Bogles	12.69	12.69	0.00	-----	-----	-----	3.46	0.1621	0.856
Kerchevals	16.15	16.15	0.00	-----	-----	-----			

SACRAMENTO RIVER, ABOVE SACRAMENTO.
ELEVATIONS AND GRADES—LOW WATER, 1878; HIGH WATER, 1879.

LOCATION.	LOW WATER.			HIGH WATER.		
	Elevation Low Water—Feet	Elevation High Water—Feet	Difference between High and Low Water—Feet	Difference in Elevation of Low Water, Station to Station—Feet	Fall per Thousand.	Fall per Mile—Feet
Sacramento	9.35	27.27	17.92	0.48	0.0897	0.474
Mouth of American River	9.83	28.00	18.17	1.09	0.0779	0.411
Brytes Bend	10.92	28.82	17.90	0.88	0.0830	0.438
Six-Mile Bar, upper end	11.80	29.72	17.92	0.85	0.0830	0.438
Monument	12.25	30.50	18.25	0.45	0.0857	0.489
Ten-Mile Shoals, lower end	12.44	30.62	18.18	0.19	0.0584	0.314
Ten-Mile Shoals, upper end	13.62	30.75	17.13	1.18	0.1041	0.549
Elkhorn Ranch	13.84	30.83	16.99	0.22	0.0335	0.177
Jacobs Break, upper end	14.84	31.09	16.25	0.50	0.0427	0.226
Gray & Shaws	14.77	31.82	17.05	0.43	0.0368	0.194
Browns Break	15.14	32.87	17.73	0.37	0.0359	0.190
Gibbons	15.53	33.39	17.86	0.39	0.0639	0.353
Mouth of Feather River	16.03	33.81	17.78	0.50	0.0779	0.411
Grays Bend	17.36	35.12	17.76	1.75	0.0435	0.230
Portuguese Bend	19.36	35.76	16.40	1.58	0.0608	0.321
Portuguese Bend, at point	19.67	35.84	16.19	0.29	0.0933	0.501
Grafton (Knights Landing)	19.97	36.12	16.15	0.32	0.0381	0.201
D. C. Reels	21.77	38.40	16.63	1.80	0.0529	0.280
Rackerbys	23.17	40.31	17.14	1.40	0.0691	0.365
Moore	23.72	41.32	17.60	0.55	0.0660	0.349
Kirkville	25.06	43.50	18.44	1.34	0.0661	0.349
Winns Landing	26.93	45.73	18.80	1.87	0.0662	0.350
Wilkins Slough	30.26	51.00	20.74	3.33	0.0784	0.414
Eldys	32.91	54.36	21.45	2.65	0.0785	0.415
Sycamore	37.59	59.49	21.90	4.68	0.1052	0.556
Meridian	38.57	59.80	21.23	0.98	0.1054	0.556
Moons Ferry	40.71	62.04	21.33	2.14	0.1052	0.556
				0.24	0.0694	0.366
						0.720
						0.309
						0.448
						0.327
						0.198
						0.061
						0.064
						0.117
						0.329
						0.538
						0.471
						0.892
						0.345
						0.172
						0.130
						0.281
						0.176
						0.354
						0.493
						0.121
						0.640
						0.1075
						0.417
						0.0789
						0.1240
						0.055
						0.591
						0.0905
						0.1153
						0.0383
						0.176
						0.582
						0.1101
						0.2659

Butte Slough	40.95	62.93	22.01	2.15	0.0714	0.377	3.84	0.1276	0.674
Colusa	43.10	66.80	33.70	14.36	0.2146	1.183	12.62	0.1887	0.946
Caldens	57.46	79.42	21.96	9.20	0.2260	1.194	8.29	0.2037	1.076
Princeton	66.66	87.71	21.05				4.99	0.1983	1.047
Butte City		92.70					19.02	0.3066	1.635
Jacinto		111.72					18.79	0.3454	1.824
Mouth of Stony Creek		130.51					7.59	0.3450	1.822
Chico Ferry		138.10					18.06	0.3420	1.807
Colbys Ferry		166.16					62.04	0.4896	2.586
Tehama		218.20					48.00	0.6359	3.240
Red Bluff	244.10	266.80					15.70	0.5815	3.070
Iron Cañon		282.50							

SACRAMENTO RIVER.

CHANNEL WIDTHS AND GRADES.

Distance, in miles -----	15.8	11.9	18.3	27.7	19.7	14.4	50.2	52.8	58.3
<i>Low Water, 1878—</i>									
Total fall, in feet -----	0.98	3.53	3.53	5.17	6.20	3.94	21.0	67.5	150.0
Average grade per mile, in feet -----	0.06	0.30	0.19	0.19	0.32	0.27	0.42	1.28	2.57
Maximum grade of any five miles, in feet -----	0.07	0.39	0.30	0.30	0.40	0.36	0.54	1.7	4.4
Minimum grade of any five miles, in feet -----	0.06	0.21	0.17	0.06	0.19	0.22	0.29	0.4	1.4
Maximum grade of any one mile, in feet -----	0.07	0.45	0.40	0.43	0.70	0.45	0.55	1.7	5.5
Minimum grade of any one mile, in feet -----	0.05	0.20	0.17	0.05	0.13	0.10	0.27	0.3	1.1
Average width of channel, in feet -----	1,163.	407.	381.	531.	517.	286.	249.	450.	500.
Widest average for any one mile, in feet -----	2,084.	580.	610.	740.	709.	301.	343.	620.	700.
Narrowest average for any one mile, in feet -----	687.	215.	274.	442.	427.	246.	193.	300.	300.
<i>High Water, 1879—</i>									
Total fall, in feet -----	6.84	6.73	6.73	11.85	5.81	2.31	26.8	67.5	152.
Average grade per mile, in feet -----	0.43	0.57	0.37	0.43	0.29	0.16	0.53	1.28	2.61
Maximum grade of any five miles, in feet -----	0.54	0.75	0.43	0.58	0.47	0.19	0.66	1.7	4.6
Minimum grade of any five miles, in feet -----	0.32	0.33	0.27	0.28	0.17	0.05	0.42	0.6	1.6
Maximum grade of any one mile, in feet -----	0.60	0.85	0.45	0.60	0.55	0.30	0.80	1.7	4.7
Minimum grade of any one mile, in feet -----	0.30	0.08	0.20	0.20	0.06	0.00	0.22	0.5	1.5
Average width of channel, in feet -----	1,297.	468.	417.	627.	683.	320.	281.	500.	580.
Widest average for any one mile, in feet -----	2,100.	597.	623.	850.	770.	333.	383.	650.	800.
Narrowest average for any one mile, in feet -----	704.	259.	282.	480.	502.	286.	216.	320.	375.

SACRAMENTO RIVER.

AVERAGE ELEVATIONS OF BANKS, LEVEES, AND HIGH WATERS ABOVE LOW WATER OF 1878.

LEFT BANK.					RIGHT BANK.					
LOCALITY.					LOCALITY.					
Bank	Levee	High Water, 1878	High Water, 1879		Bank	Levee	High Water, 1878	High Water, 1879		
<i>Steamboat Slough.</i>					<i>Steamboat Slough.</i>					
Collinsville to a point 2½ miles below Tolands	5.2	9.6	8.6	8.1	Collinsville to a point ¾ of a mile below Tolands	4.6	9.7	8.1	8.1	
From 2½ miles below Tolands to Enmatton	5.5	11.4	8.6	8.0	From ¾ of a mile below Tolands to Rio Vista	6.5	10.0	10.0	8.5	
Enmatton to Three-Mile Slough	6.5	11.0	10.2	8.6	Rio Vista to foot of Grand Island	7.6	11.6	11.6	8.8	
Three-Mile Slough to Rio Vista	9.0	12.0	11.5	8.9						
Rio Vista to foot of Grand Island										
<i>Steamboat Slough.</i>					<i>Steamboat Slough.</i>					
Foot of Grand Island to lower end Grand Island	5.0		13.0	9.0	Foot of Grand Island to Sutter Slough	6.5		12.6	8.7	
Levee					Sutter Slough to head of Grand Island	9.4		13.4	10.0	
Lower end Grand Island Levee to Walkers Land- ing	5.0	13.5	13.5	9.0						
Walkers Landing to Sutter Slough	6.7	14.5	13.4	8.7						
Sutter Slough to head of Grand Island	9.2	15.1	13.6	10.1						
<i>Old Sacramento River.</i>					<i>Old Sacramento River.</i>					
Foot of Grand Island to Isleton	7.2	12.5	11.1	8.5	Foot of Grand Island to lower end Grand Island	7.5		11.4	8.8	
Isleton to Walnut Grove	8.0	11.9	11.0	8.5	Levee	6.9		10.6	8.2	
Walnut Grove to head of Grand Island	10.0	13.7	11.8	10.2	Lower end Grand Island Levee to Hebb's house	8.2		13.1	8.7	
					Hebb's house to Walnut Grove	10.0		11.1	10.1	
					Walnut Grove to head of Grand Island			15.0		
<i>Main River.</i>					<i>Main River.</i>					
Head of Grand Island to Courtland	10.0	14.5	13.8	11.4	Head of Grand Island to Sutter Slough	11.5		13.9	10.3	
Courtland to Clarksburg	11.2	15.5	14.1	12.5	Sutter Slough to Clarksburg	11.7		15.4	12.5	
Clarksburg to Davis Brickyard	13.0	15.7	14.8	14.0	Clarksburg to Millas	13.4		15.2	14.2	
Davis Brickyard to Du Boses	13.7	17.5	15.7	14.8	Millas to Du Boses	13.9		18.2	15.7	
Du Boses to break at Lovedals	14.4	18.4	18.0	16.0	Du Boses to break at Lovedals	14.1		18.2	16.1	
Break at Lovedals to old bed of American River	14.0	21.4	20.0	17.5	Break at Lovedals to Sacramento	14.3		20.0	17.5	
Old bed of American River to Brytes Bend	15.5	20.5	20.5	18.0	Sacramento to Brytes Bend	14.7		22.1	17.9	
Brytes Bend to Monument	15.3		19.5	17.8	Brytes Bend to Monument	14.5		20.5	17.9	

SACRAMENTO RIVER—Continued.

LEFT BANK.				RIGHT BANK.			
LOCALITY.				LOCALITY.			
Bank	Levee	High Water, 1878	High Water, 1879	Bank	Levee	High Water, 1878	High Water, 1879
Monument to Jacobs Break	15.5	18.2	16.9	Monument to Hayes Landing	14.5	18.1	16.8
Jacobs Break to Hayes Landing	14.3	17.6	16.6	Hayes Landing to Browns	14.1	18.6	16.7
Hayes Landing to break above Gray & Shaws	15.8	18.7	16.8	Browns to Feather River	14.5	18.9	17.9
Gray & Shaws to Browns	16.8	18.1	17.3	Feather River to Grays Bend	15.8	20.2	18.7
Browns to Feather River	15.8	19.2	17.6	Grays Bend to break at Johnsons	15.5	19.3	16.6
Feather River to Grays Bend	15.5	18.7	17.6	Break at Johnsons to Knights Landing	16.2	17.9	16.2
Grays Bend to Rackerbys	15.7	17.7	16.6	Knights Landing to Bostwicks	15.7	20.2	16.6
Rackerbys to Knights Landing	17.0	18.0	16.2	Bostwicks to Moores	16.6	20.0	17.1
Knights Landing to two miles below Bostwicks	16.0	19.1	16.4	Moores to two miles below Winns Landing	17.1	17.8	18.3
Bostwicks to Moores	16.0	17.5	17.0	From two miles below Winns Landing to Winns Landing	16.8	19.6	18.6
Moores to Winns Landing	16.8	18.8	18.4	Winns Landing to Wilkins Slough	18.5	22.0	20.0
Winns Landing to Wilkins Slough	18.8	21.10	19.5	Wilkins Slough to Grimes Landing	19.1	22.5	20.5
Wilkins Slough to Grimes Landing	18.9	21.6	20.6	Grimes Landing to Meridian	20.0	22.8	21.3
Grimes Landing to Grand Island Mills	19.3	20.9	21.3	Meridian to Butte Slough	20.5	23.5	22.0
Grand Island Mills to Meridian	20.0	22.0	21.5	Butte Slough to Colusa	21.5	24.4	22.2
Meridian to Butte Slough	20.1	22.0	21.2	From Colusa to a point three and one half miles above Colusa	22.0	25.0	23.6
Butte Slough to two miles above Butte Slough	20.8	22.5	21.8	From three and one half miles above Colusa to three miles below Caldens	21.3	22.3	22.6
Colusa to Chapmans	21.8	22.7	22.2	From a point three miles below Caldens to Caldens	20.9	23.8	22.1
Chapmans to Caldens	19.8	21.8	22.3	Caldens to Princeton	20.1	23.5	20.3
Caldens to Princeton	19.9	20.5	21.5	Princeton to Butte City	20.0	22.5	20.6
Princeton to Butte City	20.0	20.2	20.6				

FEATHER RIVER.

At Oroville, where Feather River breaks from the hills into Sacramento Valley from the east, it has a drainage basin of three thousand six hundred and fifty-four square miles. Its watershed line for about one hundred and thirty miles follows the summit of the Sierra Nevada.

Its mountain drainage basin is fan-shaped, and the water collected by the river from it, when rains are general, sometimes causes tremendous freshets, usually of short duration. The river has at such times overtopped its right bank and overflowed the relatively high plain lands to the northward of the Sutter Buttes. Such flooding has occurred even before the great reduction of waterway below the mouth of the Yuba River impeded the outflow of flood waters along the channel of the river.

Upon entering Sacramento Valley, the river turns toward the south and holds a quite direct course to its junction with Sacramento River. This part of the river is sixty-seven miles long.

In 1849 it was a clear-water stream flowing over bars of gravel and cobble, between well defined banks, to its junction with Yuba River. It maintained a very uniform channel below that point, and its water was clear and deep to its mouth at the low stages of the water. Tidal influence extended for some distance up this river.

The following is from the State Engineer's report of 1880:

The channel of Feather River has been subjected to such considerable changes during the last ten or fifteen years, that a description of its present condition would not convey a just idea of the real character of the river. It was, in 1848, a clear-water river, with a well defined high bank channel. It left the mountains in a rocky bed, and ran alternately over short cobble-bottom rapids, where, at low water, but one (1) or two (2) feet of depth was found, and through pools of several miles in length, sometimes with water ten to twenty-five feet in depth at the lowest stages. This character continued to near the point of entrance of the Yuba, from whence, on down, fine gravel and sandbars appeared in place of those coarser materials, with long reaches intervening where the water was from eight to fifteen feet deep, on the average, at its lowest stages, but becoming less deep, and sand only appearing on the bars, as it approached the Sacramento.

In the letter from the Anti-Debris Association to the Board of United States Engineers appointed to report on the mining debris question, the following statement is made:

The beds of the Yuba and Feather Rivers gradually rose from successive deposits of debris, until in 1868 the people of Marysville found it necessary to build levees to protect the city from overflow. The city is situated upon the high bank of the Yuba River, and about one mile from its junction with the Feather. Up to 1862 the Yuba was navigable all the year for ships and boats drawing from nine to ten feet of water, and during the winter seasons deep-water ships and steamers from around Cape Horn navigated it to the foot of E Street. The site of the city was above extreme high water, and it was never overflowed till after the commencement of modern hydraulic mining. The river beds continued to rise after the building of the levees, and during the flood of 1875, which was much less in volume than that of 1862, the levees broke, and for the first time in its history Marysville was inundated.

Yuba River, in 1849, and before that time, was flanked by bottom lands, and flowed in a bed deep below the surface of these bottom lands. It, too, was a clear-water stream.

The same was true of Bear River. Its bottom lands merged to the north and south with those on the east bank of Feather River, and high plain land was back from the river some distance.

The bottom lands along Yuba and Feather Rivers in their original condition were inundated only in times of extraordinary floods.

Now the channel of Feather River below Yuba River presents a very different appearance. It has become the repository of so much mining detritus that its bed has been nearly filled. Its bottom is nearly at the height of its former banks. The water plane at Marysville, at the low stage of Yuba and Bear Rivers, is now at least fifteen feet higher than it was in 1849, and the rise of the river bottom is still greater. Even ordinary stages of water are now so high on the levee, and above natural ground surface, that the limit of usefulness of the present levee systems seems to have been almost reached. Though they may be built high enough to prevent their being overtopped, and broad enough to prevent their breaking, they cannot be made to check the seepage water which, during protracted mean stages, as in the past spring, must bring disaster to vegetation of every class for a great distance out from the river.

Facts bearing upon the injury to orchards and other culture plots will, it is hoped, be quite fully presented in the forthcoming report of the United States Mining Debris Commission, which report is not yet accessible.

Where crevasses occur in the river levees at points where the levee is close to the bank of the river, as in the case of the Nelson Point crevasse just below Nicolaus, on the right bank of the river, the possibility now exists of permanent changes being made in the river's alignment. It may leave its channel whenever the sandbar in the river below the crevasse is higher than the natural ground, out to which bank erosion extends, and the water can thus secure a lower point of outfall.

This sand-fill in the river bed we found very great in the lower reaches of Feather River this summer, because the protracted high stage of the Sacramento had formed and maintained, for a long time, a water dam at the mouth of Feather River. The general level of the sand in Feather River was raised nearly to this long sustained height, and thence, on an up-slope, toward Marysville. The sand flow in Feather River is greater than its ordinary volume of flow can handle. The freshets cut out the material in the mountain cañons, and pile it into the rivers just where they reach the valley. Succeeding years of slight but protracted rises keep carrying some of it down stream. This process must continue so long as the mountain cañons afford material to come down in quantity. Then the erosive process becomes continuous. We are pleased to be able to say that we have reason to believe that such erosion in the channels of both Yuba and Bear Rivers is now annually taking place. What both of these rivers now need, as does that portion of the Feather River below the mouth of the Yuba River, is a lower outfall point, and this is to be secured in but one way—by the lowering of the water plane in Sacramento River, at and below the junction of this river with the Feather.

Colonel G. H. Mendell, in his annual report to the Chief of Engineers, U. S. A., on July 7, 1876, says:

It has been stated in a previous report that the pools in the Feather River have been filled, since the advent of the mines, twenty feet or more, so that now the bed of the river has been raised almost to the level of its banks. The mining operations not only continue to exist, but their magnitude grows under the application of new and tremendous appliances. * * *

It must be plain that under these circumstances the conservation of the navigable channels becomes a problem of great magnitude, and of special difficulty. It cannot be solved by building a wingdam where a shoal makes this year or next.

If it and kindred problems of carrying safely the flood waters can be solved at all, they must be solved by first acquiring a thorough knowledge of all the physical facts and conditions, by a complete diagnosis. This done, the remedy, if one exists, may be discovered.

The following tables of distances, elevations, grades, and dimensions have been compiled from data collected by the State Engineer Department:

FEATHER RIVER.

DISTANCES, LOW-WATER AND HIGH-WATER ELEVATIONS, AND GRADES.

LOCATION.	DISTANCE FROM MOUTH OF RIVER.		DISTANCE FROM STATION TO STATION.		Elevation, Low Water, above Base—Feet.....	Elevation, High Water, above Base—Feet.....	Difference between High and Low Water—Feet..	LOW WATER, 1878.			HIGH WATER, 1879.		
	Feet.....	Miles	Feet.....	Miles				Difference in Elevation, Station to Station—Feet.	Fall per Thousand.	Fall per Mile—Feet	Difference in Elevation, Station to Station—Feet.	Fall per Thousand.	Fall per Mile—Feet
Mouth of Feather River	0	0	0	0	16.03	33.81	17.78	3.26	0.3490	1.8429	0.87	0.0930	0.4910
Cross-Section 20	9,340	1.769	13,685	2.512	19.29	34.68	15.39	3.01	0.2199	1.1613	1.27	0.0930	0.4910
Cross-Section 22	23,025	4.360	6,975	1.321	23.41	35.95	13.65	1.11	0.0813	0.4292	0.65	0.2118	0.9190
D. O. Mahoney's	30,000	5.681	10,210	1.934	24.24	36.60	13.19	0.83	0.0813	0.4292	2.16	0.2118	1.1184
Cross-Section 25	40,210	7.615	14,340	2.716	25.74	38.76	14.52	1.50	0.1046	0.5623	3.04	0.2911	1.1184
Nicolaus	54,550	10.331	17,300	3.883	26.48	41.80	16.06	0.74	0.1014	0.5352	2.13	0.2911	1.5372
Mouth of Bear River	61,850	11.714	15,275	2.893	28.93	43.93	17.45	2.45	0.1604	0.8469	4.44	0.2911	1.5372
Cross-Section 29	77,125	14.607	9,400	1.780	30.02	48.37	19.44	1.09	0.1160	0.6123	1.39	0.1479	0.7808
Cross-Section 30	86,525	16.387	25,525	4.834	36.11	49.76	19.74	6.09	0.2386	1.2598	3.28	0.1286	0.6790
Cross-Section 32	112,050	21.221	8,700	1.648	38.90	53.04	16.93	2.79	0.3207	1.6932	1.48	0.1701	0.8982
Cross-Section 33, about 600ft. below O'Neil's.	120,750	22.869	12,800	2.424	40.85	54.52	15.62	1.95	0.1523	0.8044	4.49	0.3508	1.8516
Cross-Section 34	133,550	25.293	11,200	2.121	44.06	59.01	18.16	3.81	0.3405	1.7981	3.99	0.3564	1.8516
Spungers	144,750	27.414	7,375	1.510	47.38	63.00	18.34	2.72	0.3405	1.7981	1.40	0.1755	0.9269
Cross-Section 35	152,725	28.925	6,275	1.188	49.48	64.40	17.02	2.10	0.3347	1.7670	2.76	0.4398	2.3024
Mouth of Yuba River	159,000	30.113	1,775	0.336	49.79	67.16	17.68	0.31	0.1746	0.9221	0.74	0.4169	2.2012
California Pacific Railroad Bridge	160,775	30.449	5,975	1.132	49.83	67.90	18.11	0.04	0.0070	0.0368	1.90	0.3180	1.5789
S. M. Bliss'	169,750	31.581	1,667	0.364	50.79	72.33	19.97	0.16	0.0070	0.0368	2.53	0.1113	0.5874
Cross-Section 48	189,490	35.888	22,740	2.985	51.44	75.81	22.34	0.80	0.0508	0.2680	3.45	0.2209	1.1661
Channel Station 1235	205,250	38.873	6,500	1.231	51.44	75.81	25.02	0.60	0.1000	0.5280	1.44	0.2209	1.1661
Channel Station 1248	211,750	40.104	5,500	1.042	62.65	77.25	25.81	1.21	0.2200	1.1616	1.21	0.2209	1.1661
Channel Station 1259	217,250	41.145	10,500	1.989	67.50	78.46	25.81	4.85	0.4619	2.4385	2.32	0.3205	1.6322
Channel Station 1280	227,750	43.134	5,000	0.947	59.16	80.78	23.28	1.66	0.3320	1.7530	1.60	0.3205	1.6322
Channel Station 1290	232,750	44.081	5,000	0.947	66.15	82.38	23.22	6.99	0.4664	2.4624	4.81	0.3205	1.6322
Channel Station 1320	247,750	46.922	24,000	2.841	77.56	87.19	21.04	11.41	0.4754	2.5102	10.81	0.4504	2.3782
Channel Station 1368	271,750	51.467	24,000	4.545	84.74	98.00	20.44						

[illegible]

FEATHER RIVER.

DIMENSIONS AND GRADES.

	Nicolaus to Sacramento River	Yuba River to Nicolaus	Burtis Ferry to Yuba River	Oroville to Burtis Ferry
Distance, in miles.....	10.3	19.8	24.2	12.9
<i>Low Water</i> —				
Total fall, in feet.....	12.9	20.9		
Average fall per mile, in feet.....	1.25	1.06		
Maximum fall of any five miles, in feet.....	1.36	1.80	2.06	
Minimum fall of any five miles, in feet.....	0.49	0.74	0.06	
Maximum fall of any one mile, in feet.....	1.80	1.83	2.50	
Minimum fall of any one mile, in feet.....	0.35	0.60	0.05	
Average width of channel, in feet.....	340.	330.	280.	200.
Widest average width for any one mile, in feet.....	370.	410.	320.	470.
Narrowest average width for any one mile, in feet.....	280.	240.	200.	150.
<i>High Water</i> —				
Total fall, in feet.....	10.1	23.2	38.8	56.9
Average fall per mile, in feet.....	0.98	1.17	1.60	4.41
Maximum fall of any five miles, in feet.....	1.07	1.82	2.64	4.58
Minimum fall of any five miles, in feet.....	0.50	0.68	1.18	3.80
Maximum fall of any one mile, in feet.....	1.10	2.15	2.80	5.20
Minimum fall of any one mile, in feet.....	0.50	0.80	1.00	3.20
Average width of channel, in feet.....	510.	620.	340.	260.
Widest average width for any one mile, in feet.....	580.	820.	400.	520.
Narrowest average width for any one mile, in feet.....	180.	300.	510.	460.

YUBA AND BEAR RIVERS.

A volume could be filled by a detailed recitation of the changes which have occurred along Bear and Yuba Rivers since 1849.

Both of these streams were tortuous watercourses, flowing in more or less well cut channels through bottom lands, from the hills to the Feather River.

In the case of both, the bottom lands have been covered with silt, sand, and slickens (as locally called) to a great depth; so great, in fact, that we now find levees on the old upland or plains to prevent their inundation. A space two to three miles wide between these levees has, in case of the Yuba, been given up to the waters of the river, while on the Bear, small areas of the original bottom lands, at and above Wheatland, still afford excellent opportunity to study the magnitude of the changes.

The following extract is from the report of a committee on Medical Topography, Meteorology, Endemics, and Epidemics, made to the Medical Society of California, in September, 1881:

The city of Marysville is situated on the north bank of the Yuba River, at its confluence with the Feather River. Originally, the more elevated portions of the town site were above the reach of overflow, and as the lower part has been filled in and raised to the higher level, if the river channel had remained in its natural condition, the place would never have suffered from being flooded; but as the bed of the Yuba became raised, and the channel of Feather River obstructed, the town became subject to inundation, which has caused much damage, besides being a source of heavy expense in building and keeping up levees for protection.

In the early settlement, the bank of the Yuba was cut down and graded at a point within about a mile of its mouth, to accommodate the steamboat business, and that continued to be the regular landing until the channel became obstructed with debris; since which time, the filling of the channel, and the covering and filling up of the bottom land to the depth of from eight to fifteen feet, has raised the bed of the river twenty-eight feet, and to the level of the streets at the old landing, and higher at all points above. Formerly there was a sharp rise, or low bluff, of from six to ten feet, separating the bottom from the adjacent upland, and as the river bed became raised, levees were constructed nearly on the line dividing the lowland from the upland, to confine the river within the area, which had already been destroyed; since which, the process of deposit and elevation has continued, the height of the levees being increased as required, until the debris plane has become higher than the former high land on either side of it.

The late Captain Jas. B. Eads, in his report as Consulting Engineer for the State Engineer Department, in 1880, said:

The effect of the detritus upon the Yuba and Bear Rivers has been much more marked than in the case of the Feather and Sacramento. In these tributary streams the original channels have been wholly filled up and obliterated, and the waters, overflowing the banks, have transformed a formerly fertile region into a barren wilderness. Once these streams were pure and clear; there were fields producing valuable harvests, extensive orchards, and substantial houses. Now, these are all buried in the mass of earth which the uncontrolled floods have deposited, and prosperity has given place to desolation.

In 1882, Colonel G. H. Mendell, in an official report on the rivers of California, says:

The elevation of the bed of the river is not accompanied by an equal rise in the level of the banks. The level of the beds approaches more and more the level of the bank. In the cases of the Yuba and Bear, non-navigable streams yet to be described, the level of the beds has risen from a depth a number of feet below the banks to an elevation of several feet above the banks.

These instances may be taken to illustrate the ultimate condition of the Sacramento and Feather Rivers, under a continuance of the influences to which they are now subjected. The abandonment of existing channels is a consequence to be apprehended. * *

The Yuba and Bear tributaries of the Feather, and the American, a branch of the Sacramento, present to inspection large deposits of detritus in their beds and on adjoining alluvial lands.

These are in places of temporary lodgment, where they are left by one flood and removed in greater or less degree by the succeeding one. Each movement carries a quota into the navigable streams, and maintains the features of these rivers that have been described.

The loci of these deposits are determined by the circumstances of the case, among which may be mentioned the character of the detritus as to size and weight, the volume of flood waters, and the natural grades of the river beds.

Differences of circumstances correspond to widely different localities of deposit.

The cañons of the three forks of the Yuba are distinguished by heavy, natural grades. The mines on the Yuba afford a large supply of fine material, and the flood discharge is large; consequently, we find the upper cañons quite free from deposit, which begins to be important only where the three forks unite to form the main Yuba.

On the Bear a great proportion of heavy material is deposited near the head of the river, about and above Dutch Flat. The river does not head in the high Sierra, and, therefore, it has not the same flood characteristics as the Yuba. We find a very large and increasing deposit in the vicinity of the mines themselves.

In 1879 Professor Pettee found the bed of the Bear, at the crossing between Dutch Flat and Little York, to be ninety-seven feet higher than in 1870, and that in the same interval Steep Hollow, between Little York and You Bet, had risen one hundred and thirty-six feet. (Volume II, page 425, Auriferous Gravels, by Prof. J. D. Whitney.)

The best information available leads to the opinion that the Bear River here is filled one hundred and fifty feet in depth; Steep Hollow, two hundred and fifty feet; and the Greenhorn, at the crossing of Nevada and Dutch Flat road, two hundred feet deep.

Where the detritus consists, in part, of heavy cobbles or larger stones, it is supposed to remain where deposited, or at least to be moved slowly. It thus forms a barrier, which serves to impound above it a mass of gravel, which otherwise would have traveled further down stream.

The steep grade of the Bear River bed below the Dutch Flat dump may be taken to be that which the floods in this stream require to give motion to the heavy material there deposited.

The average grade from Dutch Flat, for ten miles below, to Nevada Railroad bridge, is fifty-five feet to the mile, being about thirty feet at the lower end, and presumably eighty feet at the upper. Over all this distance the cañon is filled and graded—cobles and large stones above, with diminished sizes below.

With the exception of about eleven miles, the river bed is filled from Dutch Flat to the mouth. Below the Nevada Railroad bridge, wherever the grades are in the neighborhood

of twenty-five and thirty feet to the mile, there are large deposits; and where the grade is forty feet, the amount is noticeably decreased, while in the eleven miles already mentioned as free from deposits, the grade varies between eighty and one hundred and forty feet to the mile.

On any such grades as have been mentioned, the deposits are mainly gravel and cobbles, with comparatively little sand. The great reservoirs of sand lie at the exit of the river from the foothills and on the plains below, where the deposit is widened in resemblance to, but not to the same extent as on the Yuba, with grades of from eight to five feet to the mile. * * *

At its escape from the mountains, where the foothills recede and give width to the plain, the Yuba spreads out its load of sand and gravel over a plain of fifteen thousand to sixteen thousand acres, which has risen until it now stands above the level of the adjoining country on either side.

This plain has a slope of about ten feet to the mile, varying above and below this limit as you ascend or descend the river bed, being fifteen feet at the foothills and five feet at Marysville, ten miles below. The sizes of material have some correspondence to the grades.

Ascending the stream one passes to a continually increasing average size of material. While it is nearly all sand below, above it becomes nearly all gravel, with, however, considerable admixtures of different sizes everywhere.

This eruption from the mountains has destroyed thousands of acres of alluvial land. The State Engineer, in 1880, estimated that fifteen thousand two hundred and twenty acres had been seriously injured by these deposits from the Yuba.

On the Yuba the great deposits of gravel are found on a grade of thirty feet to twenty feet to the mile. The sand predominates greatly in slopes of ten feet and below.

On grades greater than forty feet to the mile the cañons are generally quite clear of material, unless it be stones of considerable size.

The forks which have been alluded to as quite free from deposits, have grades generally exceeding fifty feet to the mile.

The bottom of the Yuba River, at Daguerre Point, about nine miles above Marysville, has an elevation of one hundred and eighteen feet. The river bed under the D-Street bridge had an elevation of fifty-seven feet (July 10, 1890). There is an average fall of about six feet per mile between these two points. With this fall in a bed of sand and a decrease of the quantity of material annually delivered into the river, it is not surprising to find that the river is actually making channel. It has already carried off the mud or slickens with which the sand was intermingled a few years ago, and the river bed now presents all the peculiarities of rivers which flow through vast beds of sand.

The brush which has been growing so densely between the river levees, and which now stands in clumps from one to the other, forces the water into tortuous channels. In these the sand seeks the horizontal position; and the evil of widely separated levees becomes apparent in a peculiar way. Who can tell what point of the levee on the south bank of the river is opposite a given point on the north levee, perhaps two and one half miles distant? The river may here be flowing parallel to the levee direction, or it may be flowing almost at right angles to it. In the latter case, there is a rapid deposit of sand just at and below the point where the turn to the direction across the stream is made, and the irregular gradient thus established for a protecting levee system may puzzle the shrewdest engineer.

If the river continues thus to scour from year to year, as there is every reason to believe that it will, then protection from high water on this side of Marysville may soon be sought in channel building rather than in raising levees.

The direction at which Yuba River enters Feather River, is almost directly opposed to the direction of the latter's flow. Without entering into a detailed description of this junction of the river, we urge the necessity of making the proper channel correction of Yuba River as soon as possible.

In the case of Bear River the same ability to scour out a new channel through the great beds of recent deposits is manifest. But, in the case

of this river, we note an absence of an outfall channel to Feather River. The river has no mouth. Its former mouth is almost obliterated. It can hardly be found from the Feather River side. It is a shallow swale overgrown with dense brush. The river water, after passing through the Narrows, near the lower bridges, spreads out over a great expanse of brush-covered Feather River bank lands.

No other improvement on Bear River need be suggested or discussed until this part of the river channel has been replaced by an artificial channel having a direct course to Feather River. This may so reduce water elevations at all points above as to make levees almost superfluous.

For further information concerning distances and grades along Yuba and Bear Rivers, we add here tables compiled from data in the office of the State Engineer:

YUBA RIVER.

DISTANCES, LOW-WATER ELEVATIONS, AND GRADES.

LOCATION.	Distance from Mouth of River—Miles.....	Distance between Stations—Miles.....	Low-Water Elevation—Feet.....	Fall per Mile—Feet.....
Mouth of river (Marysville)	0.00	0.80	49.0	7.5
D-Street Bridge, Marysville.....	0.80	0.25	55.0	
Railroad Bridge, Marysville.....	1.05	1.30	.....
Citizens Levee.....	2.35	4.40	.....	6.3
T. B. Hall's place (McCarger).....	6.75	1.85	.....
State Brush Dam.....	8.60	1.90	104.0	8.4
Daguerre Point.....	10.50	2.50	120.0	
Dry Creek.....	13.00	2.50	145.0	10.0
Yuba Mill and Mining Company's shaft.....	15.50	2.25	.....
Timbuctoo Dump.....	17.75	.....	225.0	17.0

Elevation of gauge zero on D-Street Bridge.....	51.61
Elevation of high water, 1862, D-Street Bridge.....	63.26
Elevation of high water, 1875, D-Street Bridge.....	67.50
Elevation of high water, 1890, D-Street Bridge.....	68.40

BEAR RIVER.

DISTANCES, LOW-WATER ELEVATIONS, AND GRADES.

LOCATION.	Distance from Mouth of River—Miles.....	Distance between Stations—Miles.....	Low-Water Elevation—Feet.....	Fall per Mile—Feet.....
Mouth of river.....	0.00	2.60	29.0	3.5
Narrows, lower end.....	2.60	1.60	38.0	5.0
Lower Bridges.....	4.20	6.70	46.0	4.5
Long Bridge.....	10.90	1.30	76.0	9.5
Upper County Bridge.....	12.20	0.50	.....
Railroad Bridge.....	12.70	3.20	93.0	6.9
Johnsons Crossing, State Brush Dam.....	15.90	1.60	115.0	11.3
Camp Far West.....	17.50	.....	133.0	

AMERICAN RIVER.

At Folsom, about twenty miles east of Sacramento, the American River breaks out of the mountains, carrying into the valley the drainage waters from an area of one thousand nine hundred and ninety-nine square miles of the western slope of the Sierra Nevada Mountains. This river is torrential in character. It has a small summer flow, but during winter and spring its waters sometimes rise very rapidly, and to very high stages.

Its flood flow is generally of very short duration. It remains at its highest point only a few hours, and in flood rarely more than a day.

At Folsom, where the river leaves its granite cañon, it enters upon a long flow over and between cobble bars. It has an elevation at its low stages of about one hundred and twelve feet at Folsom. The hills upon its south break away from the river just below Folsom, and a high gravel bar rises from the water's edge. North of the river small patches of bottom land lie between a high table land and the river.

The river's bed changes from cobble to gravel and then to sand as it approaches the Central Pacific Railroad bridge, east of Sacramento.

Its water, near the river's mouth, flows in a broad, shallow channel. The river's sandy bottom is only four to ten feet below tops of natural banks. At high stages the water spreads over its banks toward the Sacramento River, connecting toward the north with the American Basin, and toward the south standing against the Sacramento City levees, and entering the channel of the Sacramento River close above Sacramento.

The American Basin thus becomes the outfall point of the American River at its high stages, and during the protracted floods of the Sacramento the sand deposits in this vicinity from American River water, particularly in its own river channel, are very extensive.

The confluence of American and Sacramento Rivers is not unlike that of the Yuba and Feather. American River water enters the Sacramento in a direction almost at right angles to that of the main stream. An improvement of this confluence should be planned, on the basis of special surveys covering the whole region to the north and east of Sacramento, because, as has often been suggested, it may be found advisable to cut an entirely new channel for the river from near Brighton to a point on the Sacramento River near Freeport.

Distances and grades along the valley portion of the American River are noted in the following table:

AMERICAN RIVER.

DISTANCES, LOW-WATER ELEVATIONS, AND GRADES.

LOCATION.	Distance from Mouth of River —Miles	Distance be- tween Stations —Miles	Low-Water Ele- vation—Feet.	Fall per Mile— Feet
Mouth of river.....			9.8	5.1
Twelfth-Street Bridge.....	2.0	2.0	20.0	1.9
Railroad Bridge.....	3.6	1.6	23.0	2.4
Opposite Brighton.....	7.5	3.4	31.0	2.6
Routiers.....	12.5	5.5	45.0	4.0
Farmers Diggings.....	17.7	5.2	66.0	4.7
Alder Creek.....	22.8	5.1	90.0	5.5
Folsom Bridge.....	26.8	4.0	112.0	

SACRAMENTO RIVER FLOOD BASINS.

The great volume of water which enters Sacramento Valley through Iron Cañon, during a flood stage of from twelve to forty-eight hours' duration, does not flow past any point of the two hundred and fifty miles of river channel below Red Bluff as rapidly as it is delivered through Iron Cañon. A large portion of the flood may be required to fill the channel bank-full, and as soon as this has occurred, then the flow across the banks into flood basins hundreds of square miles in area, whose water subsequently rises and falls with the river, further delays the flood wave in its passage to the bay. Weeks of time are sometimes required to deliver into the bay the water which may have passed Red Bluff in a few hours.

No further illustration is needed to show that that part of the flow of Sacramento River, due to the entry of a flood wave at the upper end of the valley, decreases as the mouth of the river is approached; because, if the aggregate volume requires a longer time in passing, the rate of flow per unit of time must be less. At first view it appears, therefore, as though the flood basins along the river could not be other than desirable regulators of its flow in its lower portions, and that their conservation would be desirable.

This is, however, not always the case, and it may happen, as after protracted high stages of the upper river, that the flood basins increase instead of decrease the flow of water in the lower river. This is particularly liable to occur when, by reason of the formation of some crevasse, there is a sudden and very great precipitation of water from one basin into another.

In order to be effective reducers of the river's flow, the basins should receive no water from the river until the river waterway is taxed to its utmost capacity, and no water which has passed a river division of small capacity should flow into the same basin with water from above that division. Whenever this occurs, and it is the condition which prevails in the case of the Yolo, the American, and the Sutter Basins, then water accumulates in the basins which should have been delivered to

the bay, and the output of the basins is increased by this amount when they are finally filled to the highest stage of the river.

BUTTE BASIN.

The depression east of Sacramento River to the northwest and west of the Sutter Buttes is known as Butte Basin. It receives the water of Butte and Battle Mountain Creeks, the east-side overflow from Sacramento River in the second division, particularly the overflow which reaches the Angel Slough country, and in times of great floods some of the Feather River flood waters which flow westward past the northern slope of the Buttes. This basin is a very broad flat-bottomed depression, in which water flows from north to south, until the rising Sacramento River, by discharging water through Butte Slough and across banks into the lower end of this basin (and into its outlet to the Sutter Basin), forms a water dam holding back the Butte Basin waters to a contour line of about sixty feet (above low water Suisun Bay), or, if the basin be not already full, fills it to this height.

The bottom of the basin has a gradual slope from north to south. It had a free outfall toward the south between the Buttes and Butte Slough, but the same is being rapidly choked by a dense growth of willow.

During a general flood stage of the river the basin holds a slow-moving sea of water from thirty to nearly one hundred and fifty square miles in area, according to the amount of inflow into the basin.

The contents of the basin cannot be determined with precision, because in times of flood the water surface of the basin has more or less slope depending upon the locality from which it receives its greatest accession of water, and the high-water stages indicated around its margin may not all have prevailed at the same time.

When the outflow of the basin is checked at the lower end by a river stage above banks, its contents generally range between five billion cubic feet and twenty billion cubic feet of water.

Much less land would be covered by water in this depression, if the water leaving Sacramento River, across the east bank, below Colusa, were all led directly into Sutter Basin, instead of partly into Butte Basin, and if the outlet from Butte into Sutter Basin were enlarged and kept free from obstructions, and if finally no water from the river were let into the basin at lower stages of water than high bank heights.

No attempt has yet been made to shut off all river water from entry into this basin. River levees to the east of the basin have not been extended above Butte City, although some of the sloughs and depressions leading eastward and southeastward from the overflow at the head of Angel Slough have been closed by dams and levees. Chico Creek flood waters are poured into the basin from the north, which is, in short, an important supplemental valley drainway.

The discharge from this basin, as already stated, is into Sutter Basin. Under ordinary circumstances, no water from it effects a direct reentry into Sacramento River. Such discharge could only be had at times when the river falls more rapidly than the water in the basin. This inflow, at less than bank heights, would be through Butte Slough, which is connected with Butte Basin only by a circuitous route.

SUTTER BASIN.

Above the confluence of Sacramento and Feather Rivers, lying between the relatively high bank lands of these streams, and to the south of the Sutter Buttes, lies a flat depression whose lowest points are ten to twenty feet below the general elevation of the banks of the rivers. This depression is known as the Sutter Flood Basin. If the entire district along this part of the Sacramento River, which is occasionally submerged, be considered a part of the flood basin, then it has a length of over thirty miles and an average width of six miles. The upper ten miles of this district are, however, so much higher than the rest of the basin that as soon as the inflow of water from above ceases, they are quickly drained into the lower portion of the flood basin, whence there is no escape for the water, except at the height of the water in Sacramento River at its confluence with Feather River.

The elevation of high water at the mouth of Feather River in ordinary floods is about thirty-four feet. When the Sutter Basin is full of water to this height, its surface has an area of one hundred and thirty-eight square miles, and its contents range from twenty-five billion cubic feet of water to thirty-nine billion, according to the prevailing conditions of inflow.

When there is a great rush of water from the north into this basin, as there was last winter at its highest stage, and the water surface at the mouth of Feather River is at an elevation of thirty-five feet, then there are approximately thirty-nine billion cubic feet of water in the basin, or more than four times the amount which would fill the entire Sacramento River channel below Iron Cañon from a low-water to a high-water plane.

At every high stage of Sacramento River the Sutter Flood Basin is filled. It receives the river water from below as well as from above, and not infrequently its greatest supply is received from its lower end. Long before the river is at a height which would endanger levees below the mouth of Feather River, its waters have been flowing through Sacramento Slough and other outlet channels of Sutter Basin northward into the basin, and even across banks into it.

All of the water which, at such stages, flows northward into the basin, should have been discharged through the river channel into Suisun Bay. In Sutter Basin it lies as a menace to the lower portions of the valley if the freshet, which filled the basin, be long continued, or be followed by a second one.

The general elevation of the lowest portion of this basin is nineteen to twenty feet. It is barely as low as the low-water plane of Sacramento River at the mouth of Feather, and its complete drainage is, therefore, difficult. The river does not fall to its lowest stage till in the fall of the year, and the feeders of the drainways leading to the river do not connect in all cases with the lowest portions of the depression. Under these circumstances drainage is imperfect, and water stands in some portions of this flood basin throughout the entire year.

Before the filling in of the channel of Sacramento River had taken place, the flow of water toward this river—then some nine feet lower than it now is—was more rapid, and evaporation from land-locked pools in the flood basin extended over a greater time period. The basin was comparatively dry in the summer and fall months.

The outlets of this basin are a number of deep sloughs which discharge into Sacramento and Feather Rivers close above their confluence.

Sutter Basin is the recipient of all the water flowing southward past Sutter Buttes from Butte Basin. It receives the flow of Butte Slough, one of Nature's relief outlets in the east bank of Sacramento River, which begins to carry off river water into the Sutter Basin long before the river is really in need of any easement, to the injury of the river channel below. Butte Slough thus contributes unnecessarily toward the filling of Sutter Basin, which, when considered as a regulator of the river's flow, should not be receiving a drop of water until the river channel is taxed beyond its capacity.

Sutter Basin also receives all the water from breaks in the east-bank levees of Sacramento River, from Butte Slough to Knights Landing, and indirectly, the water from all east-side levee breaks above Butte Slough. It receives the Feather River floods, which break out toward the west across the plains below Oroville, and all the water from breaks in the west-side levees of Feather River.

COLUSA BASIN.

A glance at the contour map of Sacramento Valley will show that Cache Creek has built a broad ridge, ten to twenty feet in height, across the west side of the Sacramento Valley. The creek at present flows on the southern slope of this ridge, and discharges its water into the upper end of Yolo Basin. The ridge is continuous across the west side of Sacramento Valley from the foothills to the west bank of the river at Grafton (Knights Landing). Above this ridge, and between high plain lands on the west, and the river bank on the east, lies Colusa Flood Basin. This basin, like the one upon the east side of the river, has no outlet except into the river, and can discharge no water except at an elevation as great as that of the water in the river at Grafton.

The drainage from the entire Coast Range foothill region, between the watersheds of Cache and Stony Creeks, flows into Colusa Basin, which receives also all the water escaping from the channel of Sacramento River across its west bank, at points between Stony Creek and Grafton.

When, in times of general inundation, the water in this flood basin stands as high as the water in the river at Knights Landing, it becomes closely connected with Sutter Basin by water across the west and east banks of Sacramento River, and the two inland seas are practically one, the stage of water in both depending upon the stage of the river at and below Grafton.

By the maintenance of a continuous line of levee from Grafton up the west side of Sacramento River to near Stony Creek, some success has been met with in preventing the spreading of the Sacramento River water from its channel across the west-side plain into Colusa Basin. Inundation of the lands in this flood basin has thus been confined in many seasons of less than average rainfall to a small area of greatest depression; but recent experience has demonstrated that Coast Range waters, as well as flood waters from the river, may cause a general submersion of the lands in the southern portion of this basin.

A general river flood, before waters were confined by levees, converted the entire west-side trough, from a point west of Princeton, to the ridge

at Grafton, into a long and narrow inland sea nearly fifty miles long, and two to seven miles in width. Its water was all slowly moving from north to south, and its reentry into Sacramento River was effected through lower Sycamore Slough at Grafton, or across river banks. The breaks in the levees during the last twelve years, and the drainage from Coast Range, together, have barely filled the basin at any time to more than the elevation of high water at Knights Landing (about thirty-six feet).

At this elevation of the water surface, Colusa Basin has a capacity of about thirty billion cubic feet of water. The amount of water which may have been spread over the entire west-side plain at a time of general flood, before any levees were built, may have reached forty-five billion cubic feet.

The Knights Landing ridge, as above explained, forces the water of Colusa Basin eastward into Sacramento River. If this ridge had not been extended across the west-side trough of Sacramento Valley, then Colusa Basin would have been in direct connection with Yolo Basin, and it would have had an outlet through it to the lower rivers. No complete drainage (by a gravity flow of water) is possible for this flood basin during high stages of Sacramento River, except through the Knights Landing ridge. Its inundation in seasons of more than ordinary average rainfall, so long as no such drainway exists, can be prevented only by a system of works designed to keep out the river water, and to divert the Coast Range drainage past the basin.

Several sloughs, natural high water relief channels, lead westward from Sacramento River into Colusa Basin, and these have in every case built up their banks above the general surface of the country. By reason of this building up of low, flat ridges into the basin from the river bank, which is itself ten to twenty feet higher than the general surface of the bottom of the basin, the continuous slope of the bottom of the basin from the north to the south has been interrupted to some extent, and a number of pockets have been formed which lie between or above these sloughs. Upper Sycamore Slough has thus extended its course nearly across the west-side trough, and formed a lesser upper basin, which, except in times of general inundations, is connected with the lower or main portion of Colusa Basin only by a narrow throat between Sycamore Slough and the higher west-side plain.

AMERICAN BASIN.

The east-side depression, which lies just above American River, and extends northward along the east side of Feather River to Nicolaus, is known as American Flood Basin. This flood basin receives the water which escapes through breaks in the south-side Bear River levees, and in the east-side Feather and Sacramento River levees below Bear River, and also the Sierra Nevada foothill drainage which reaches Sacramento Valley between Bear and American Rivers.

Before the low-water plane at Sacramento was raised, as already explained, the drainage of American Basin through its outlet channels (Bannon Sloughs) was complete at the low stage of the rivers. While the low-water plane at Sacramento remains at or above seven to eight feet on the rod at Sacramento, as in the last ten years, the lowest portion of the basins are not completely drained. The low-water stage

is attained so late each season that some water now remains in the lowest portions of this basin throughout the entire year.

The Sacramento River, when in flood, or at any stage at or above banks, fills American Basin to the height of its own water at the mouth of American River. The filling commences by an inflow of water through a number of sloughs, deep channels leading from the interior of the basin to Sacramento River, just above the American River, and as soon as the Sacramento River is bank-full it sends water across banks, unobstructed near the mouth of American River, and through breaks in its east-side levees, just below the mouth of the Feather River, into the basin, until the whole surface of the same rises and falls as the river rises and falls.

At the high stage of the Sacramento River in December, 1889, just before the west-side levee below Sacramento broke, American Basin had thus been filled to an elevation of thirty-two feet at its lower end. It was receiving water in large quantities near the mouth of Feather River, and the average elevation of its water surface was about thirty-three feet. It contained at that time about twenty-five billion cubic feet of water, and the area of its water surface was one hundred and ten square miles.

In falling a foot at Sacramento this vast reservoir is drawn upon to the extent of one foot in depth over its whole surface, and in rising a foot the entire reservoir surface also rises one foot. The quantity of water taken from the reservoir at its highest stage, by a fall of one foot, or added to it by a rise of one foot, is about three billion cubic feet, or the equivalent of ten hours' flow of Sacramento River, at flood stage, past Sacramento City.

The American Basin's water, at flood stage, not only stands above banks along Sacramento River, being confined on the west by the west-side levees, but it spreads southward across American River to the north levee of Sacramento City. It would, if Sacramento City levees were not built out from high land westward to the river bank, extend still further south along the ridge to Sutterville.

At flood stages this basin is the practical outfall point of American River waters. Its contents, at flood heights, range from fifteen billion cubic feet to twenty-five billion cubic feet.

SACRAMENTO BASIN.

That portion of the east-side trough which lies above the river delta lands, and to the south of Sacramento, has been protected from annual inundation better than the other portions of the submersible plain adjacent to Sacramento River. It is not, for this reason, generally classed among the flood basins of the river; and, like Colusa Basin, it is not accessible to flood waters of the American or Sacramento Rivers while the reclamation works can withstand the force of these waters.

This basin is long and narrow. A ridge of relatively high ground which approaches Sacramento River from the northeast at Freeport, cuts it into an upper and a lower section. About thirty-five square miles of the lowest portions of this basin has an elevation of less than ten feet above low water of Suisun Bay, and lies ten to fifteen feet lower than the elevation of extreme high water in the river channel. It is through this depression, by way of a drainage ditch to Snodgrass

Slough, that the drainage waters from Sacramento City are delivered into branches of San Joaquin River, and through this river into Suisun Bay.

YOLO BASIN.

The largest of the several flood basins which lie along Sacramento River is Yolo Basin. It extends from near Grafton on the north to Cache Slough on the south. It has a length of over forty miles and an average width of seven miles. Its capacity in times of general inundation, when its water surface slopes from the north toward the south at the rate of four to six inches per mile, is about fifty billion cubic feet of water, and even this would be exceeded if the inflow of water from above were sufficiently rapid.

This basin has an outlet into Sacramento River at the lower end of Grand Island, and it becomes a steady flowing sea in times of general floods. During the high stages of the Sacramento River, after the west-bank crevasse had occurred in December, 1889, Yolo Basin was delivering more than twice as much water into lower Sacramento River as was delivered by the main stream. It has a surface area (when measured on the incline plane represented by a water surface of about thirty feet near Grafton, and about eleven feet near the lower end of Grand Island) of nearly three hundred square miles.

Cache and Putah Creeks discharge into this basin. About ninety square miles of the bottom of this depression is less than ten feet higher than the low water of Suisun Bay, and the lowest portion of it is always covered with water (Big Lake).

Yolo Basin, as is the case with some of the others above described, begins to receive river water long before the river is bank-full or in need of relief. Through Cache Slough the tides ebb and flow. Their rise and fall ranges from nearly six feet at low water to about one foot at extreme flood stages. At every rise of the river the water quantity in the basin is increased, and when the river reaches its ordinary flood stage, even before an overtopping of banks takes place, Yolo Basin is full to the level of the river water at the foot of Grand Island. If, now, any quantity of water be turned suddenly into the basin at any point above, it will cause a crowding of water to the point of inflow into Sacramento River, and higher stages of the water may thus result than could have been produced had the river been confined throughout to a well regulated channel, or had the spreading of waters into the basin been gradual, as would be the case if there were no levees along the river.

SAN JOAQUIN VALLEY.

Sacramento and San Joaquin Valleys together are but one great depression between the Sierra Nevada Mountains and the Coast Range. Through the former valley, nearly midway between the outlying hills of the two mountain ranges, Sacramento River flows from the north to its outfall into Suisun Bay. San Joaquin Valley meets the Sacramento Valley opposite this point of outfall. It extends thence toward the southeast a distance of about two hundred and fifty miles, and has an average width of over forty miles. The Coast Range watershed area

tributary to this valley is small—three thousand four hundred and eighty-seven square miles—compared with that of the Sierra Nevada Mountains—sixteen thousand and eighty-nine square miles.

From the Coast Range the drainage waters descend in numerous small creeks and gulches having no summer flow, unless fed by springs, while most of the water in the Sierra Nevada reaches the valley in rivers of considerable summer flow.

The lower portion of the valley, that lying within the river deltas, has already been described. Above this region the valley consists of two great plains of unequal extent, which slope from the hills upon either side of the valley toward the valley trough. Of these the east-side plain is by far the widest; the trough of the valley lies near the base of the Coast Range. Land building has been much more rapid by the rivers which descend from the long western slope of the Sierra Nevada than by the small streams from the abrupt short eastern slope of the Coast Range.

The building process has not been equally rapid along the lines of all the east-side rivers, and there are to-day two points where silt, deposited from rivers, has, in the course of the ages that have passed since the valley has been raised above the level of the sea, formed flat ridges entirely across the valley trough, converting portions of the valley above, or south of each of these ridges into basins, which have become the recipients of drainage water and prevent its flow down the valley to the extent of their capacities as reservoirs.

One of these ridges of high land has been built by Kings River, and above the same is Tulare Lake, which, at high stages, has an area of about eight hundred square miles. The other is along the northern portion of the Kern River delta, and in the basin above the same lie Kern and Buena Vista Lakes.

Elevations of the valley land along the east and southeast of the delta of San Joaquin River range from ten to twenty feet. Thence, following the trough of the valley southeastward, elevations gradually increase to two hundred and fourteen feet, the general surface of the ground on the flat saddle below Tulare Lake. The lowest point in the bottom of Tulare Lake is about one hundred and seventy-five feet high, and thence there is a rise of about one hundred and twenty feet to the outfall point of Buena Vista Lake. This lake and Kern Lake lie in the two lowest points of the depression above Kern River ridge, and their beds are at a height of about two hundred and eighty-five feet.

From the eastern extremity of Kern Lake the valley rapidly rises toward the south and east to an elevation of over five hundred feet at the extreme southeastern end or apex of the valley.

Toward the valley trough the eastern plain extends with a gradual slope from northeast to southwest. The fall is generally within the limits of five to fifteen feet per mile. Steeper slopes generally prevail near the edge of the hills than at the approach to the trough of the valley.

The edge of the valley to the east of Stockton, at the base of the foothills, is about one hundred and ten feet in height. It is one hundred and fifty feet to the east of Modesto, four hundred feet to the east of Fresno, and continues to rise to over five hundred feet at the upper end of the valley.

The narrow west-side plain has a more rapid fall than the east-side

plain. From the hills to the edge of the overflow region, which lies adjacent to the main drainage line of the valley, this fall is generally ten to twenty feet per mile.

The area of San Joaquin Valley is about eleven thousand five hundred square miles, which may be classified as follows: east-side plain, seven thousand seven hundred square miles; west-side plain, one thousand eight hundred and fifty square miles; lands covered with water, and lands subject to occasional inundation, about one thousand nine hundred and fifty square miles, of which three hundred to over nine hundred square miles, according to the stage of Tulare Lake, are lake surfaces.

Precipitation of moisture is so light throughout the southern portions of the Sierra Nevada Mountains, the upper parts of the San Joaquin Valley, and the eastern slope of the Coast Range, that the years in which more water has reached this part of the valley than is required to replace the amount annually evaporating from the surface of the San Joaquin Valley lakes, have been very rare. The entire drainage basin above Tulare Lake, including a part of the flow of Kings River, therefore becomes tributary to San Joaquin River only at long intervals. This can be best illustrated by a brief history of the fluctuations of the Tulare Lake water surface.

After several wet winters preceding 1853, the lake was found full, though possibly not quite as high as in 1862, or in 1868.

From 1853 until 1861 the low-water plane of the lake receded. At what rate each year cannot now be determined; but in 1861 the water surface was as low as two hundred and four feet, if the testimony of some of the residents at the lake at that time in reference to the rise of water the following winter, can be relied upon. The heavy rainfall of 1861 to 1862 caused the water surface of the lake to rise to the highest stage at which it has been known—two hundred and twenty feet above low tide, Suisun Bay. Its area was increased from about three hundred to nearly eight hundred square miles. Its contents were increased by three hundred billion cubic feet of water during this one winter. It continued to overflow in the following winter and spring, but owing to less than average rainfall in the seasons preceding 1867 and 1868 it receded gradually, with annual fluctuations of a few feet, until the water surface was only at about two hundred and eight feet in 1867. It rose between eleven and twelve feet in the winter and spring of 1867 and 1868, almost if not quite reaching the high-water stage of 1861 to 1862.

The water surface fluctuated between two hundred and eleven and two hundred and seventeen feet in the years 1872 to 1876, then receded rapidly to the lowest stage at which the lake has ever been known to be, one hundred and ninety-two feet, in November, 1883. From that time to this year, 1890, the lake has not received sufficient water to cause it to overflow. It is generally believed that the diversion of water for irrigation purposes from Kern, Tule, Kaweah, and Kings Rivers has been the cause of the decrease of water volume in the lake, but this is not true. Although such diversion must produce some effect on the lake, the evidence that protracted low stages preceded that of 1883 is conclusive. On the northeastern shore of the lake, close by the mouth of Mussel Slough, there is a group of tree stumps, at an elevation of about two

hundred feet. These were found at the water's edge in 1882. They presented the appearance of having been broken off at a height of three to four feet above ground. They were well preserved, and must have been under water for nearly thirty years succeeding the high stage of the lake of 1853. These stumps are the remnants of a grove of willow trees, one hundred and more, of which some had grown to a diameter of four feet. It would not have been possible for these trees to attain such growth if the lake had not been at a low stage for many years in succession at some time preceding 1853.

All drainage basins above the lake, including at least one half of the lands drained by Kings River, are thus ordinarily cut off from the region above noted as tributary to San Joaquin River. That part of its drainage basin thus cut off has an area of about twelve thousand square miles.

The total drainage area of San Joaquin River, at its outfall into Suisun Bay, is thirty-one thousand nine hundred square miles. The area ordinarily tributary to the river is only nineteen thousand nine hundred square miles, and this includes seven thousand five hundred square miles of valley land from which there is, ordinarily, little or no drainage into the river.

The mean annual rainfall in that part of the river's drainage basin which is directly tributary to the river, is about twenty inches; it is less than ten inches in the district draining into the river through Tulare Lake.

When the lake overflows, its waters unite with Kings River water, and flow northwesterly through Fresno Swamp in a network of channels, and enter San Joaquin River at Las Juntas.

San Joaquin River, in its flow to this point, is elsewhere described. The important tributaries of the river are all Sierra Nevada streams.

Kern River has a mountain drainage area of two thousand three hundred and forty five square miles. It breaks through a granite mountain about ten miles northeast of Bakersfield, and flows thence between low hills for a distance of about fifteen miles. Entering upon the east-side plain of the valley, its natural flow to Kern and Buena Vista Lakes is in a number of delta channels, most of which have recently been closed, or converted into distributing channels, as part of a comprehensive system of irrigation works. The river water at high stages flows, in part, toward the lakes, and, in part, northward through Buena Vista Swamp to Tulare Lake.

Tule River, whose outfall is into Tulare Lake, has a mountain drainage area of only four hundred and thirty-seven square miles. Before reaching Tulare Lake its waters separate into a number of channels, and some of these reunite again. This river has a perennial flow at the foothills, but at its low stages all the water sinks before reaching the lake. The river has a large spring flow, and annually submerges large tracts of land along its banks.

Canals and ditches having a combined capacity of about six hundred cubic feet per second, receive water from Tule River for irrigation purposes. About eight thousand to ten thousand acres of land are annually irrigated by these, but the extent of country which they command is very much greater.

Distances and grades along its channels are noted in the following table from unpublished data in the office of the State Engineer:

TULE RIVER.

DISTANCES, LOW-WATER ELEVATIONS, AND GRADES.

LOCATION.	Distance from Head of Wilcox Ditch—Miles*	Distance from Station to Station—Miles*	Elevation of Low Water, or Bottom of River—Feet....	Difference in Elevation, Station to Station—Feet....	Grade per Mile—Feet	
Wilcox and South Tule River Ditch (South Fork)	0.0	1.0	604	122.	50.83	
Junction of North and South Forks of Tule River	1.0	1.2				
Pioneer Canal (R. B.)	1.2	0.5				
Traylor Ditch (R. B.)	1.7	0.7				
S. E. Dept. Gauging Station	2.4	1.5	482			
Plano Ditch (L. B.)	3.9	0.5				
Porter Slough (R. B.)	4.4	1.0				
Vandalia Ditch (L. B.)	5.4	0.3				
Hockett Ditch (R. B.)	5.7	0.2				
Wallace Ditch (R. B.)	5.9	0.2				
Rose Ditch (L. B.)	6.1	1.2		162.	10.06	
Mitchel, Springer & Rose Ditch (L. B.)	7.3	0.1				
South-Side Canal (L. B.)	7.4	0.2				
Porterville-Plano Bridge	7.6	1.2				
McGee, Putnam & Caldwell Ditch (R. B.)	8.8	0.3				
Gilliam Ditch (R. B.)	9.1	0.8				
Hubbs & Miner Ditch (R. B.)	9.9	0.6				
Fine Ditch (L. B.)	10.5	2.5				
Callison Slough and English Ditch (L. B.)	13.0	1.3				
Stockton Ditch (L. B.)	14.3	0.2				
Fulweiler Ditch (R. B.)	14.5	0.4				
Ball & Harris Ditch (L. B.)	14.9	0.2				
Hunsaker Ditch (R. B.)	15.1	1.2				
Empire Ditch (L. B.)	16.3	1.8				
Woodville Ditch (L. B.)	18.1	0.2				*320	60.	5.46
Head of North Channel of Lower Tule River, Sec. 16, T. 21 S., R. 26 E. (R. B.)	18.3	1.9				
Head of Stadtmiller Branch of Tule River, Sec. 17, T. 21 S., R. 26 E. (R. B.)	20.2	3.5				
Mouth of Stadtmiller Branch of Tulare River, Sec. 4, T. 21 S., R. 25 E. (R. B.)	23.7	3.8				
Tipton or Mitchel Canal	27.5	0.3				
Bacigalupi Ditch (R. B.)	27.8	0.2				
Janes Ditch (L. B.)	28.0	0.8				
Head of Lone Oak Slough (L. B.)	28.8	0.4				
Head of Lower South Tule River (L. B.)	29.2	0.1				
Railroad Crossing	29.3	1.6	*260			
Gully Ditch (L. B.)	30.9	1.5		46.	3.62	
Junction with North Channel of Lower Tule River, Sec. 22, T. 21 S., R. 24 E. (R. B.)	32.4	0.4				
Swall & Wessling Ditch	32.8	1.2				
Junction with Elk Bayou, Sec. 20, T. 21 S., R. 24 E. (R. B.)	34.0	5.5				
Junction with Lower South Tule	39.5	2.5				
Tulare Lake Segregation Line	42.0		*214			
<i>Porter Slough.</i>						
Head of Porter Slough	4.4	3.8				
Porterville-Plano Road	8.2	1.4				
Putnam & Miles Ditch (L. B.)	9.6	1.4				
Miller Ditch (R. B.)	11.0					

*Approximate.

TULE RIVER—Continued.

LOCATION.	Distance from Head of Wilcox Ditch—Miles*	Distance from Station to Station—Miles*	Elevation of Low Water, or Bottom of River—Feet.	Difference in Elevation, Station to Station—Feet.	Grade per Mile—Feet
<i>North Channel of Lower Tule.</i>					
Head of North Channel of Lower Tule River, Sec. 16, T. 21 S., R. 26 E.....	18.3		*320		
Pletts Ditch (R. B.).....	19.8	1.5			
Thomas Ditch (R. B.).....	20.0	0.2			
Elrod, or Walker & Lewis Ditch (R. B.).....	21.8	1.8			
Bond Ditch (L. B.).....	22.5	0.7			
Head of School-house Branch of North Branch of Lower Tule River (L. B.).....	22.6	0.1			
Brown & Ray Ditch (R. B.).....	23.4	0.8		62.	6.33
Junction with the School-house Branch of North Branch of Lower Tule River (R. B.).....	25.1	1.7			
Burnett Ditch No. 1 (R. B.).....	26.4	1.3			
Burnett Ditch No. 2 (R. B.).....	27.4	1.0			
Railroad Crossing.....	28.1	0.7	*258		
Junction with main Tule River, Sec. 22, T. 21 S., R. 24 E.....	31.1	3.0	*249	9.	3.00
<i>School-house Branch of North Branch of Lower Tule River.</i>					
Head of School-house Branch of North Branch of Lower Tule River.....	22.6				
Klein Ditch (L. B.).....	24.3	1.7			
Rogers Ditch (L. B.).....	24.5	0.2			
Junction with main North Branch of Lower Tule River.....	25.0	0.5			
<i>Stadtmiller Branch of Tule River.</i>					
Head of Stadtmiller Branch, Sec. 17, T. 21 S., R. 26 E.....	20.2				
Rogers Ditch.....	23.1	2.9			
La Marsna Ditch.....	23.7	0.6			
Junction with main Tule River.....	23.8	0.1			
<i>Lower South Tule River.</i>					
Head of Lower South Tule River, Sec. 19, T. 21 S., R. 25 E.....	29.2		*261		
Railroad Crossing.....	29.3	0.1			
Swall Ditch.....	31.9	2.6			
Finney Ditch.....	33.4	1.5			
Fancher Ditch.....	33.7	0.3		38.	4.13
Mouth of Callison Slough.....	34.4	0.7			
Junction with main Tule River.....	38.4	4.0	*223		

*Approximate.

Kaweah River, which enters San Joaquin Valley northeast of Visalia, with a mountain and foothill drainage area of six hundred and nineteen square miles, falls into Tulare Lake through several delta channels. Its waters, which flow through the Four Creek country, are spread to the northward until they mingle with water from Kings River, in lower Cross Creek, and are carried to the southward by Elk Bayou into the delta region of Tule River.

At the low-water stage of Kaweah River, its whole flow sinks before reaching Tulare Lake. At its high stages inundation from its many branches is widespread.

Canals, ditches, and natural waterways used as irrigation canals, having an aggregate capacity of about eight hundred and eighty cubic feet

per second, draw their water supply from Kaweah River, and irrigate thirty thousand to forty thousand acres of land annually.

The following table of distances and grades is taken from unpublished data in the office of State Engineer:

KAWEAH RIVER.

DISTANCES, LOW-WATER ELEVATIONS, AND GRADES.

LOCATION.	Distance from Three Rivers—Miles	Distance from Station to Station—Miles*	Elevation of Low Water, or Bottom of River—Feet	Difference in Elevation, Station to Station—Feet	Grade per Mile—Feet
Three Rivers	0.0	2.0			
Homer's Place	2.0	1.0			
Horse Creek (L. B.)	3.0	1.0	540		
Pogue's Upper Ditch (L. B.)	4.0	2.5			
Pogue's Lower Ditch (L. B.)	6.5	0.5		61.	12.45
Mouth of Lime Kiln Creek	7.0	0.3			
Ogden Ditch	7.3	0.6			
Wuchumna Canal (R. B.)	7.9	1.3	479		
Head of St. Johns River (R. B.)	9.2	2.5	*465	14.	10.77
Hamilton Ditch (L. B.)	11.7	0.9			
Hamilton Bridge	12.6	1.1			
Landes Slough, head of People's Canal (L. B.)	13.7	1.0		77.	11.00
Mouth of wasteway from People's Canal (L. B.)	14.7	0.2			
Mouth of Pemberton Slough (R. B.)	14.9	0.4			
Mouth of Lane Slough (R. B.)	15.3	0.9			
Head of Deep Creek (R. B.)	16.2	0.8	*388		
Crossing of the Old Ketchum Ditch	17.0	0.3			
County Bridge	17.3	0.3			
Goad's Dam, Tulare Canal (L. B.)	17.6	0.1		26.	8.14
Mouth of upper Bacon & Crossmore Cut (R. B.)	17.7	0.6			
Sand Slough (R. B.)	18.3	0.9			
Chatten Ditch (R. B.)	19.2	0.2			
Heads of Mill and Packwood Creeks	19.4		362		
<i>St. Johns River (Canoe Creek) and Cross Creek.</i>					
Head of St. Johns River	9.2		*465		
Head of old Smith Creek, or Baker Slough, "The Canal" (L. B.)	10.4	1.2			
Curtis, Moffitt & Lindsey Ditch (R. B.)	12.0	1.6			
Bostwick Cut (L. B.)	13.5	1.5			
Ketchum Cut (L. B.)	14.1	0.6		101.	11.10
Venice Ditch (R. B.)	14.6	0.5			
Bacon & Crossmore Cut (L. B.)	14.6	0.0			
Iron Mountain Bridge	16.4	1.8			
Sand Slough (L. B.)	17.6	1.2			
Head of Elbow Creek (R. B.)	18.3	0.7	364		
Mouth of Houston Slough (L. B.)	19.0	0.7			
Cutler Bridge	19.7	0.7			
Wuchumna Canal flume crossing	19.8	0.1			
Matthew Ditch (R. B.)	20.1	0.3			
Curtis Ditch (R. B.)	20.6	0.5			
Lower Wuchumna Canal (L. B.)	21.4	0.8		51.	6.07
Jennings Ditch (L. B.)	21.8	0.4			
Rogers Ditch (L. B.)	22.2	0.4			
Uphill Ditch (R. B.)	23.0	0.8			
Patterson Bridge	23.1	0.1			
Modoc Canal	23.3	0.2			
Burrell Bridge	26.7	3.4	313		
Hayes Upper Canal (L. B.)	27.3	0.6			
Hayes Lower Canal (L. B.)	27.3	1.5		47.	5.05
Cut from Cross Creek to North Slough (R. B.)	28.8	5.4			
Railroad crossing near Grandview	34.2	1.8			
Five Bridges	36.0	2.2	*266		
Junction with North Branch of Mill or Visalia Creek (L. B.)	38.2	2.8		21.	3.23
Southern Pacific Railroad crossing	41.0	1.5	*245		
	42.5				

KAWEAH RIVER—Continued.

LOCATION.	Distance from Three Rivers—Miles	Distance from Station to Station—Miles*	Elevation of Low Water, or Bottom of River—Feet	Difference in Elevation, Station to Station—Feet	Grade per Mile—Feet
Junction with South Branch of Mill or Visalia Creek (L. B.)	49.3	6.8	*214	31.	2.3
Tulare Lake Segregation Line	55.5	6.2			
North Slough, Branch of Cross Creek.					
Head of cut from Cross Creek into North Slough	34.2	2.0	*279	12.	6.00
Central Pacific Railroad crossing near Grandview	36.2	1.5	*267		
Settlers Canal		0.8	*242	25.	3.47
Five Bridges		3.4			
Lakeside Canal		1.5			
Junction with Cross Creek					
Deep Creek.					
Head of Deep Creek		0.6	*488	39.	9.75
Kaweah Canal flume		0.3			
County Road Bridge		0.8			
Swamp at head of Cameron Creek		0.2			
Extension Canal flume		2.1	349		
Farmersville (R. B.)		1.5			
Head of Farmers Canal (L. B.)		2.3			
End of Deep Creek proper					
Mill Creek, or Visalia Creek.					
Head of Mill and Packwood Creeks (N.W. $\frac{1}{4}$ of Sec. 19, T. 18 S., R. 26 E.)		1.2	362	40.	7.27
Lower Bacon & Crossmore Cut (L. B.)		0.0			
Oaks Ditch (L. B.)		2.0			
Evans Ditch (L. B.)		0.5			
Outfall of Lower Wuchumna Canal (R. B.)		0.8			
Head of Mill Cut		0.6	322		
Mouth of Mill Cut		0.4			
Visalia (Court-house)		3.5			
Mill Creek Forks, near the west line of Sec. 26, T. 18 S., R. 24 E.					
North Channel of Mill Creek.					
Mill Creek Forks		3.6	*298	26.	7.22
Railroad crossing near Goshen		5.0	*272		
Southern Pacific Railroad crossing		1.8	*250	22.	3.23
Junction with Cross Creek					
South Channel of Mill Creek.					
Mill Creek Forks		3.0	*298	17.	5.67
Central Pacific Railroad crossing		1.0	*281		
Fulgham Ditch		1.8	*229	52.	4.69
Eaton Ditch		6.6			
McCann, Smith, Randall & Divine Ditch		1.7			
Junction with Cross Creek					
Packwood Creek.					
Head of Packwood and Mill Creeks		1.4	362	10.	7.14
Forks of Packwood Creek			*352		
North Channel of Packwood Creek.					
Forks of Packwood			*352	65.	6.31
Lower end of Bacon & Crossmore cut, from Mill Creek (R. B.)		0.5			
Evans & Turner Ditch		1.8			
Central Pacific Railroad crossing		8.0	*287		
Head of Paige & Morton distributing canals		4.3			
Packwood Canal		3.3			

* Approximate.

Kings River, unlike Kern, Tule, and Kaweah Rivers, enters the San Joaquin Valley plain in a channel flowing through bottom lands, which are considerably depressed below the adjacent plain. It drains an area of one thousand seven hundred and forty-two square miles.

Between the foothills the river flows in a broad channel in a rock-bound bed of cobbles and gravel. The river banks, at the points where the hills drop away from the river, gradually merge into the bluffs which skirt the bottom lands. About eight miles below Centerville the bluffs close in from both sides, forming the "Narrows" at Reedley. Through the Centerville Bottoms the river flows in a network of channels, falling one hundred and twenty feet in a distance by water of about fourteen and one half miles. The bluffs, which rise from the bottoms to the valley plain, have a height of ten to fifty feet, increasing from the upper to the lower end of this section of the river. Thence, for fifteen miles, the bluffs are close upon either side of the stream; and gradually decrease in height. The fall of the river has decreased to two feet per mile, and its waters commence to spread at the head of Cole Slough, its northernmost delta channel.

The river's discharge is, in part, into Tulare Lake through the main river channel, and, in part, through Cole Slough and other channels northwestward into Fresno Swamp, through which, if considered a continuation of the river, it becomes the first direct valley tributary of San Joaquin River.

Canals for irrigation divert water from the Kings River at and near the point where it leaves the foothills, and at many points within its delta. The aggregate capacity of existing canals may be noted at one thousand five hundred cubic feet per second, and the area through which their branches ramify is about six hundred thousand acres. The area actually irrigated by them each year is between one hundred thousand and one hundred and fifty thousand acres.

The following table of distances, elevations, and grades is from unpublished data in the office of the State Engineer:

KINGS RIVER.

DISTANCES, HIGH AND LOW-WATER ELEVATIONS, AND GRADES.

LOCATION.	Distance from the Initial Point of S. E. D. Survey—Miles	Distance from Station to Station—Miles	Elevation of Low Water, 1878—Feet	Fall from Station to Station, in Feet—Low Water	Grade per Mile, in Feet, Low Water	Elevation of High Water, 1867-68—Feet	Elevation of High Water, 1879—Feet	Elevation of Left Bank—Feet	Elevation of Right Bank—Feet
Initial point of S. E. Dept. Survey	0.0	0.1	493.8				499.4	511	509
Head of Seventy-six Canal	0.1	0.8		32.3	15.38	511.3		475	471
Slate Point at base of foothills	0.9	1.3						450	439
Head works of Kings River and Fresno Canal	2.2	0.6	461.5	28.5	16.76				
Old Centerville Canal	2.8	1.1							
Fresno C. & I. Company's Canal	3.9	0.1	433.0	126.7	8.23				
Fowler Switch Canal	4.0	1.5							
Centerville and Kingsburg Canal	5.5	13.8							
Narrows, lower end of Centerville Bottoms	19.3	13.8	306.3	25.2	1.83			367	370
Railroad Bridge near Kingsburg	33.1	1.2	281.1	1.8	1.50	298.4	287.8	296	304
People's Canal	34.3	0.4	279.4	0.9	2.25			295	292
Head of Cole Slough	34.7	6.5	278.5	15.7	2.42			290	290
Mussel Slough Canal	41.2	5.6	262.8	9.9	1.77			278	274
Last Chance Canal	46.8	2.6	252.9	5.6	2.15			270	262
Kingston	49.4	5.9	247.3	12.0	2.03		253.0	259	258
Lower Kings River Canal	55.3	1.8	235.3						
Rhoads Canal	57.1	12.5		28.9	2.09			212	212
Railroad Bridge near Lemoore	69.6		†205.4	0.0	0.00	220.2	211.3		
Mouth of river, at lowest stage of Tulare Lake, in or near Sec. 19, T. 20 S., R. 20 E.	78.6	*9.0	†205.4				207.4		
<i>Cole Slough.</i>									
Head of Cole Slough	34.7	2.2							
Emigrant Canal	36.9	1.0							
Mouth of Old Arroyo de Hofansas	37.9	2.2							
New channel of Cole Slough or St. Johns Canal	40.1								

Via New Channel of Cole Slough.

Head of new channel of Cole Slough.....	40.1	1.2							
Sutherland Canal (R. B.).....	41.3	1.6							
Junction with Old Cole Slough.....	42.9	0.2							
North Branch of Murphy Slough (Vanderbilt Cut, R. B.).....	43.1								
Junction of South Branch of Murphy Slough and Reynolds Slough.....	43.5	0.4							
<i>Via North Branch of Murphy Slough.</i>									
Head of North Branch of Murphy Slough (Vanderbilt Cut).....	43.1	0.3							
Grant Canal (L. B.).....	43.4	0.3							
Junction with South Branch of Murphy Slough (L. B.).....	43.7	1.9							
Nine Bridges.....	45.6	3.6							
Liberty Canal.....	49.2	3.4							
Mill-race Canal Branch.....	52.6	7.2							
Reeds Canal.....	59.8								

* Approximate.

† Low water of 1885 was 202.6.

‡ Lowest water, Nov., 1883, was 192.0.

Merced River, at the point where it enters the San Joaquin Valley, is the recipient of water from a mountain drainage basin of one thousand and seventy-six square miles. Its flow, in seasons of less than average rainfall, like that of San Joaquin and Kings Rivers, is better sustained throughout the low-water stage than that of Tule, Kaweah, and Kern Rivers. The river flows in a tortuous course through bottom lands, from the foothills of the Sierra Nevada, westward, to a junction with San Joaquin River at Hills Ferry. It is a navigable stream in its lower divisions during the high stages of water in winter and spring.

The irrigation works receiving water from this river are being rapidly extended. The irrigation canals have an aggregate capacity of about three thousand six hundred cubic feet per second, and the area of land actually irrigated is about eight thousand to ten thousand acres.

Distances and grades, from unpublished data in the office of the State Engineer, can be noted as follows:

MERCED RIVER.

DISTANCES, LOW-WATER ELEVATIONS, AND GRADES.

LOCATION.	Distance from Mouth of River—Miles*.....	Distance from Station to Station—Miles*.....	Elevation of Low Water—Feet.....	Difference in Elevation of Low Water, Station to Station—Feet.....	Grade per Mile—Feet
Mouth of river.....	0.0	3.7	50.0	40.0	2.04
Hawkins Ferry.....	3.7	15.9	90.0		
Central Pacific Railroad crossing near Livingston.....	19.6	7.2	106.0		
McSwains Ferry.....	25.8	19.0	189.0	83.0	4.37
Cox's Ferry.....	44.8	4.3	303.0	114.0	11.29
Snelling Bridge.....	49.1	1.3			
Snelling.....	50.4	3.8			
Murrays Mill.....	54.2	0.7	336.0	33.0	12.69
Merced Canal.....	54.9	2.6	369.0		
Merced Falls (above dam).....	57.5	4.8		33.0	6.88
Bend in Sec. 26, T. 4 S., R. 15 E.....	62.3				

* Approximate.

Tuolumne River is in all respects similar to Merced River, except that the irrigation works out from this stream are comparatively insignificant. Large canals for the supply of water to recently organized irrigation districts upon both sides of the river are, however, under contemplation.

This river drains one thousand five hundred and one square miles of mountainous country, and, flowing westerly across the east-side plain of the valley, joins the San Joaquin River about four miles below Grayson. It is navigable for some distance above its mouth at its high stages.

Lieut. A. H. Payson, in reporting upon the condition of Tuolumne River, in 1882, to the United States Army engineer in charge of the mining debris surveys, then being made, says:

Below La Grange the hills for the first time recede, and between them and the river come in stretches of bottom lands, high, clear of timber, save a few large oaks, and well cultivated. The bed of the stream is torn out to an excessive width, one thousand to twelve hundred feet in places, and badly choked by enormous masses of cobbles and coarse gravel.

The bordering uplands soon lose their rocky character, but retain considerable heights of from eighty to one hundred feet, and rising with very steep slopes from the valley, spread off to the north and south in low undulations, which rapidly flatten out as we go down, until at Waterford, eighteen miles below La Grange, they are merged in a flat and treeless plain. From this no sign of the river can be seen as one approaches it, till just at the brink of the deep trough through which it flows.

The bottom lands, though generally narrow, remain in good order and well cultivated till about four miles below Waterford. Here a change has taken place in the character of the river's bed, which has become much narrower, lost the broad cobble bars which mark it above, and although hard enough to be almost everywhere fordable, is chiefly sand and mud.

The bottom lands below this become very narrow, the entire width of the valley between uplands being in many places not over four hundred yards, and are given up to dense thickets of willow and cottonwood. * * *

Below Modesto bottoms remain narrow and practically valueless, the uplands gradually decrease in height till about Tuolumne City; ten miles further down the distinction has disappeared, and the stream for the remaining four miles to its junction with the San Joaquin flows through the level plain.

Distances and grades along this river are about as noted in the following table:

TUOLUMNE RIVER.

DISTANCES, LOW-WATER ELEVATIONS, AND GRADES.

LOCATION.	Distance from Mouth of River—Miles.....	Distance from Station to Station—Miles.....	Elevation of Low Water—Feet.....	Difference in Elevation, Station to Station—Feet.....	Fall per Mile—Feet.....
Mouth of river.....	0.00	3.50			
Tuolumne City.....	3.50	8.50	21.9		
Paradise City.....	12.00	3.50		23.3	1.53
Modesto, at Railroad Bridge.....	15.50	5.50	45.2		
Empire City.....	21.00	9.50		67.8	2.88
Waterford.....	30.50	8.50			
Roberts Ferry.....	39.00	7.00	113.0		
Thompsons Ferry.....	46.00	2.75		65.0	6.66
La Grange Ferry.....	48.75	1.75	178.0	12.0	6.86
Wheaton Dam (below the dam).....	50.50		190.0		

Stanislaus River, at Oakdale, where it enters San Joaquin Valley, is the drainage outlet for one thousand and fifty-one miles of the western slope of the Sierra Nevada Mountains.

Lieutenant A. H. Payson, of the United States Engineer Corps, in reporting upon this river in 1882, said:

The river bed for eight miles below Knights Ferry is of cobbles and coarse gravel, with widths varying from four hundred to eight hundred feet. The high lands upon either side are close to the bank, and though here and there are narrow strips with less than twenty feet elevation above low water, there is no properly so called bottom under cultivation.

Below this again, to the Oakdale bridge, five miles further, we find some limited areas of alluvial land, chiefly on the left bank; but they are high, clear, well cultivated in wheat, and, so far as I could learn, have not been covered in floods since 1861-62.

In this latter portion the general character of the material of the bed remains about the same, though showing here and there deposits of coarse sand; and its general width narrows to about four hundred feet, save in one place, about two miles above Oakdale bridge, where a cobble island eight hundred to one thousand feet wide by three quarters of a mile long, torn from the original bottom, divides the stream at low water into two channels.

Below the Oakdale bridge the uplands have become flat terraces, from sixty to eighty feet above low water, which widen out to inclose extensive tracts of high, well cultivated bottoms not subject to overflow, and from three thousand feet to a mile in width.

The broad cobble bars disappear in the next two miles, and the bed becomes one of coarse sand and fine gravel, with a general width of about four hundred feet, though near the lower end of this portion is another break, where, for about one half mile the banks are one thousand two hundred feet apart, and between them are low, sandy islands grown with willow. Eighteen thousand feet below the bridge, we find for the first time the stream only two hundred feet wide on sand alone, and between what appear to be the original banks, which are high, firm, and thickly grown.

From this on, for two miles further, the general conditions remain the same; high, wide, and well cultivated bottom lands, not overflowed since 1862, are on both sides of the stream, which is generally two hundred to three hundred feet broad, though here and there, for short distances, the banks have been slightly torn out and replaced by beds of sand.

Below this the valley undergoes a complete change in form, analogous to that described for the Tuolumne below Waterford. It enters a sort of secondary cañon, the upland banks of which, quite flat on top, and retaining heights of sixty feet, come within six hundred to one thousand two hundred feet of each other, while the very narrow strips of bottom land between them are rarely on both sides of the stream, and being lower than those above are subject to annual overflow, and are generally abandoned to dense thickets of cottonwood and willow.

At Burneyville Ferry, seven miles below Oakdale, the same description applies, though the upland banks are there lower, perhaps forty feet above the stream, and it is also true for practically all the remainder of the river, till quite near the San Joaquin, where all distinctions of level have become merged in the general plain.

No irrigation works, except a few small mountain and foothill ditches, divert water from this river; but extensive diversion toward the north for irrigation of San Joaquin County lands is contemplated, and works for this purpose are now in process of construction.

For a considerable distance up from its mouth Stanislaus River is navigable for ordinary river steamers at its high stages.

STANISLAUS RIVER.

DISTANCES, LOW-WATER ELEVATIONS, AND GRADES.

LOCATION.	Distance from Mouth of River—Miles.....	Distance from Station to Station—Miles....	Elevation of Low Water—Feet.....	Difference in Elevation from Station to Station—Feet.....	Fall per Mile—Feet.....
Mouth of river.....	0.0	15.5	18	25	1.05
Taylor's Ferry.....	15.5	8.0	43		
Railroad Bridge (near Ripon).....	23.5	25.0		59	1.55
Burneyville.....	48.5	13.0			
Railroad Bridge (at Oakdale).....	61.5		102	31	4.43
Lancaster's place.....	68.5	7.0	133		
Owl Rock.....	72.2	3.7	154	9	5.68
Knights Ferry (below dam).....	74.2	2.0	163		
Knights Ferry (above dam).....			181	63	35.00
Two-Mile Bar.....	76.0	1.8	226		
Pentland Dam site.....	78.6	2.6		114	31.67
Head of San Joaquin Co.'s Canal (below dam).....	79.6	1.0	340		
Head of San Joaquin Co.'s Canal (above dam).....			355		

Calaveras River, unlike the other rivers which are directly tributary to the San Joaquin, flows from the hills at the general level of the valley plain. At Bellota it separates into two principal channels, of which the southernmost one, Mormon Slough, has recently become the low-water channel. The river has a considerable winter flow, but all of its water sinks in summer.

Its drainage area above Bellota is four hundred and ninety-one square miles.

The Mormon Slough branch of Calaveras River flows through Stockton, and discharges into Stockton Channel, just west of Stockton. It is navigable for a distance of about three quarters of a mile at all stages of water.

The former main channel of the river joins San Joaquin River near the lower end of Rough and Ready Island.

Length of channel, and elevations of water or river bed, are noted in the following table, taken from data in the office of State Engineer:

CALAVERAS RIVER.

DISTANCES, LOW-WATER ELEVATIONS, AND GRADES.

LOCATION.	Distance from Jenny Lind—Miles*	Distance from Station to Station—Miles*	Elevation of Low Water, or Bottom of Channel—Feet...	Difference in Elevation, Station to Station—Feet	Grade per Mile—Feet
Jenny Lind	0.0		210.		
M. F. Gregorys (gauging station)	4.0	4.0	173.	37.0	9.25
Bellota (head of Mormon Slough)	10.5	6.5	120.	53.0	8.15
<i>Via Mormon Slough.</i>					
Bellota (head of Mormon Slough)	10.5		120.		
Upper end of Mormon Slough Canal	14.7	4.2	*94.	26.0	6.19
<i>Via Mormon Slough Canal.</i>					
Upper end of Mormon Slough Canal	14.7		*94.		
Lower end of Mormon Slough Canal	16.1	1.4	*85.	9.0	6.43
<i>Via Mormon Slough.</i>					
Lower end of Mormon Slough Canal	16.1		*85.		
Stockton and Copperopolis Railroad Bridge	18.1	2.0	68.	17.0	8.50
Head of Miner Slough	25.3	7.2	*29.0	39.0	5.42
Central Pacific Railroad Bridge in Stockton	28.8	3.5	10.0	19.0	5.43
Mouth of Mormon Slough	31.1	2.3	3.2	6.8	2.96
Mouth of Stockton Channel	32.4	1.3	3.2*		
<i>Via Old Channel of Calaveras River.</i>					
Bellota (head of Mormon Slough)	10.5		120.		
Bailey & Carpenters (bridge)	16.7	6.2	75.	45.0	7.26
J. H. Tones (county bridge)	18.4	1.7	64.	11.0	6.47
Upper end of Calaveras River Canal	22.4	4.0	*45.0	19.0	4.75
<i>Via Calaveras River Canal.</i>					
Upper end of Calaveras River Canal	22.4		*45.0		
Lower end of Calaveras River Canal	26.8	4.4	24.0	21.0	4.77
<i>Via Old Channel of Calaveras River.</i>					
Lower end of Calaveras River Canal	26.8		24.0		
Central Pacific Railroad Bridge	28.4	1.6		11.5	3.19
Lower Sacramento Road	30.4	2.0	*12.5		
Mouth of river	33.7	3.3	2.6	9.9	3.00

*Approximate.

Mokelumne River, in its course across the east-side plain of San Joaquin Valley, is so nearly of the same character as Merced, Tuolumne, and Stanislaus Rivers that it requires no special description until, reaching Woodbridge, it enters upon a long course across the

tule lands between the San Joaquin and Sacramento Rivers. Its banks throughout this portion of the river's course are low and subject to periodical inundation; they are quite firm, and there are no notable changes of alignment.

At eleven and one half miles below Woodbridge, it is joined by Cosumnes River, and at New Hope, four and one half miles below this point, it separates into two channels, which inclose between them Staten Island.

This river belongs to the navigable waters of the San Joaquin. In its flow through the tule lands, its character does not vary materially from the general character of the swamp-land streams as already described. Its width increases gradually in each of its two branches around Staten Island, and near the junction with San Joaquin River is about six hundred feet.

The area of the mountain drainage basin of Mokelumne River is six hundred and fifty-seven square miles. Concerning the navigability of Mokelumne River, Lieutenant S. W. Roessler, Corps of Engineers, U. S. Army, on October 21, 1884, reported:

The Mokelumne empties into the San Joaquin twenty miles above the latter's junction with the Sacramento, and for a distance of twenty-two miles above its mouth is a tidal stream, with a narrow, crooked channel, but ample depth of water. At a point fifteen miles above its mouth the river divides into two branches, the North and South Forks, which join nine miles below, forming Staten Island. The North Fork is the channel.

* * * * *

Beyond Benson's the tide rapidly decreases in height, and the river becomes narrower, shoaler, and more crooked, making navigation impossible.

In 1881, Col. G. H. Mendell reported concerning this river:

In the lower part of this course, and a few miles below Woodbridge, it enters the marshy district which borders the San Joaquin River, and begins to be subject to tidal influence. This circumstance makes the river navigable in its lower part. Above the deficiency of water in parts of the year, and the great fall at all times, forbid navigation. * * *

Galt Ferry, just below the mouth of Dry Creek, and ten miles below Woodbridge, is the head of practicable navigation. It would be unwise to attempt to make the river navigable above this point.

Below this point navigation is now possible, and actually exists.

C. D. Rhodes, under date of October 22, 1881, reporting to Colonel Mendell, writes:

Commencing at Woodbridge, I found the river narrow and crooked, in places not over sixty feet wide between banks, and very much choked with snags, rafts of fallen trees, and overhanging brush. At the time of making the examination the river contained so little water that a small skiff could not be forced through, and the examination was made from the banks of the river. * * *

At Dry Creek could be seen marks of about two feet of tide. * * *

Galt Ferry, at New Hope, may be considered the head of navigation for even the smallest steamers.

At the mouth of the Cosumnes River, about two and three fourths miles below Galt Ferry, is a bar across the river, and extending down stream for an eighth of a mile to Bensons Ferry. At low water this bar has one foot or less of water upon it. The full extent of rise of tide at this point does not exceed four feet at high tide.

MOKELUMNE RIVER.

DISTANCES, LOW-WATER ELEVATIONS, AND GRADES.

LOCATION.	Distance from Mouth of River—Miles	Distance from Station to Station—Miles	Elevation of Low Water—Feet	Difference in Elevation, Station to Station—Feet	Fall per Mile—Feet.
Mouth of river	0.0		0.9		
Foot of Staten Island	3.5	3.5			
<i>Via North Fork.</i>		9.5		2.1	0.16
Head of Staten Island, New Hope Landing	13.0		*3.0		
Bensons Ferry	17.2	4.2		2.0	0.44
Mouth of Cosumnes River	17.5	0.3	*5.0		
Mouth of Dry Creek	19.7	2.2		27.0	1.93
Woodbridge	20.0	9.3			
Railroad Bridge at Lodi	31.5	2.5	32.0		
Lockeford	41.5	10.0		47.0	3.24
Lone Star Mill	46.0	4.5	79.0		
Barnett's Store	53.5	7.5	122.0	43.0	5.73
Lancha Plana	57.5	4.0	154.0	32.0	8.00
Westmorelands Bridge, below dam	58.3	0.8	161.0	7.0	11.25

NOTE.—South Fork has a length of fifteen miles.

* Approximate.

COSUMNES RIVER.

DISTANCES, LOW-WATER ELEVATIONS, AND GRADES.

LOCATION.	Distance from Mouth of River—Miles	Distance from Station to Station—Miles	Elevation of Low Water—Feet	Difference in Elevation, Station to Station—Feet	Fall per Mile—Feet.
Mouth of river	0.0		*5.0		
Railroad Bridge at McConnells	10.0		33.0	28.0	2.80
McCracken Wire Bridge	23.0	13.0		109.0	5.59
Live Oak Suspension Bridge	29.5	6.5	142.0		
Michigan Bar	32.4		168.0	26.0	8.96

SAN JOAQUIN RIVER.

The general character of the country encompassed by the watershed line of San Joaquin River is not unlike that of the drainage basin of the Sacramento River, but it is a region of less rainfall.

About thirty-one thousand nine hundred square miles of Sierra Nevada, Coast Range, and valley lands send their drainage water into tributaries of the San Joaquin. But some of these tributaries, like the streams which fall into Goose Lake, in the case of the Sacramento, do not have a direct outfall to the main drain of San Joaquin Valley. All streams south of Kings River flow into or towards Tulare Lake, which they must fill to overflowing before any of their water reaches the San

Joaquin River. Even Kings River water does not all flow into the sloughs of the Fresno Swamp region, and thence to the San Joaquin River, but a large portion of it follows the main channel of Kings River and enters Tulare Lake from the north until the same, as in 1862 and in the years following 1867, sends its overflow northward, completely intercepting and turning the flow of Kings River. It thus happens that nearly twelve thousand square miles of the drainage basin of the San Joaquin River become directly tributary to this river only in or after seasons of very great rainfall.

The upper San Joaquin River breaks from the Sierra Nevada foothills about one hundred and forty miles below the southeastern end of San Joaquin Valley. It flows thence directly down the eastern valley slope in a broad gorge half a mile to a mile wide, being flanked by narrow strips of bottom land, and, upon reaching the trough of the valley, turns abruptly to the northwest at Las Juntas. It falls from this point one hundred and fifty-six feet in its course to the bay, and its length (measured along the main stream) is about two hundred and ten miles.

It is flanked by strips of relatively low land, except at a few points, such as Grayson and San Joaquin City, where the high western plain slopes down to the river bank. The extensive east and west-side low tracts are subject to frequent inundation. The capacity of the river channel falls far short of that which would be required to confine flood waters to a single channel, and the river water therefore spreads over large areas, flowing in innumerable sloughs or waterways, which sometimes are arms of the main stream, and again appear as continuations of the Coast Range or Sierra Nevada drainways, or may even appear as independent waterways without well defined heads or mouths.

The area of the country thus subject to frequent inundation along the upper San Joaquin River, that is, above the head of Old River, is about one hundred and fifty square miles. This entire region becomes a reservoir of slowly moving water when the San Joaquin is in flood; and to the accumulation of waters along this portion of the river the fact is due that relatively small waterways at points just below have come so near being adequate to pass all the water of the many seasons of less than average rainfall since the reclamation work has been taken well in hand.

The delta formation of San Joaquin River begins at the head of Old River, and it is a particularly noteworthy fact that the low-water elevation at this point is less than six feet above low tide of Suisun Bay, or only three feet above mean low tide in the bay, making the low-water fall of the river from here to its mouth, in a distance of sixty miles, less than one inch per mile.

For purposes of this report, it has been found convenient to subdivide this river into three divisions, which, for descriptive purposes, will be treated separately.

The first division extends from the point where the river breaks from the foothills to Las Juntas, where it receives the water of Fresno Slough.

The second division extends from Las Juntas to the head of Old River.

The third division embraces the delta portion of the river.

1. SAN JOAQUIN RIVER ABOVE LAS JUNTAS.

At the point near Hamptonville, where the river enters the valley, the drainage waters from one thousand six hundred and thirty-seven square miles of mountainous country flow into San Joaquin River. The river channel is broad; it has banks of alluvial bottom-land soil and a bed of sand resting on irregular ledges of granite. Thence its flow to the southwest is through a narrow bottom-land strip, from which steep bluffs rise to the higher level of the valley plain. These bluffs are continuous, but their height above the bottom lands gradually decreases, until near the valley trough they bear away from the river and merge into the general surface of the valley.

At twenty miles below Hamptonville the river is crossed by the Visalia branch of the Southern Pacific Railroad. In this vicinity gravel bars and patches of bottom land of small extent alternate upon either side of the river, with the higher bluff rising some twenty feet to the general surface of the valley.

At forty miles below Hamptonville the low lands near the river begin to spread toward the north and south. Those to the south extend to a connection with the low lands of the Fresno Slough country. The low lands toward the north border the river on the east throughout its whole northward course. Fresno Slough, the drainway collecting the outflow of Tulare Lake and the northward flowing waters of Kings River, unites with San Joaquin River at Las Juntas.

In the lower portion of this river division the river has a sandy bed. Its banks are overgrown with willow. Its channels are not subject to rapid changes. The waterway is generally three hundred to four hundred feet in width, and the river banks are about fifteen feet high.

At times of flood the lands to the south along Fresno Slough and northwestward along both sides of San Joaquin River, are subject to inundation. The only protection works constructed along this portion of the river are those which are intended to prevent the inundation of Columbia Ranch, owned by Miller & Lux. With these reclamation works an irrigation system has been combined. The levees which afford protection to the lands of the Columbia Ranch extend along the right bank of San Joaquin River, generally at a considerable distance from the river, from a point about eight miles above Las Juntas to about nine miles below this point. Near the upper end of this levee system is the head of Chowchilla Canal, which diverts water from San Joaquin River toward the north, in a channel generally fifteen feet wide and one and one half feet deep, on a grade of six inches per mile. The water thus diverted is used for irrigation on Columbia and Chowchilla Ranches.

But little is to be said of the above mentioned levee, which is generally four to six feet high, and broad enough on top for a roadway, except that it reduces by a relatively small amount the area of the flood basins of San Joaquin River.

Among other notable features in the river division are the works of the Upper San Joaquin Irrigation Canal Company. The head works of the Upper San Joaquin Canal are about three quarters of a mile below Hamptonville. At this point a loose rock dam was thrown across the river, and was maintained there for some years for the purpose of diverting water into a canal skirting and climbing the southern river bluffs, and delivering water to lands at and near the railroad crossing above

referred to. The dam across the river was of the overfall type. It was built in 1884 on a twenty-foot deep deposit of sand, resting on granite. Loose rock of all dimensions, up to two tons in weight, was quarried from a hillside and dumped from a tramway into the river on the line of the proposed dam. The rock in the upper and lower faces of the dam was hand laid. Water was raised by this structure about six feet above the low stage of the river. The dam rested against a rotten granite formation on the right, and against a soft alluvial bank, protected by cribwork, on the left. After the force of the overfalling water, during several light freshets, had demonstrated the difficulties of holding the loose rock dam, a facine protection of its crown was adopted. Facines of brush about eighteen inches to two feet in diameter were placed across the dam close against each other in the direction of the river. They afforded the needed protection for a time, but their maintenance was expensive, and they were inadequate to prevent the demolition of the dam in the past season at the first real flood stage of the river since its construction.

At the lower end of this division, in that portion of the river which the law of our State declares a public way, a second dam is maintained across the river channel. There is connected with this dam a wasteway or lock, with a falling weir, intended to be used by steamboats when passing this point. This dam is at the head of the San Joaquin and Kings River Canal. It is constructed of brush weighted with sand bags. It requires annual repairs to keep its crest at the desired height. One end of the dam rests against the right bank of the river, the other against a small island. Between the island and the west bank of the river is the wasteway, with falling weir, already referred to.

During the winter or spring rise, which is the only time at which this part of the river is navigable for steamers, steamboat men seem to prefer to take their course directly over the dam rather than through the sluice box, and they have occasionally done so at the risk of injury to their craft, and without benefiting the efficiency of the dam.

If the river above this point is practicably navigable, then it would seem that the proper Government authority should approve or disapprove of the works now there, and establish regulations for their maintenance and use.

2. LAS JUNTAS TO HEAD OF OLD RIVER.

The distance in an air line from Las Juntas to the head of Old River is eighty-seven miles. The river, in its course between the same two points, has a length of one hundred and forty-six miles. The average width of the river in this division is four hundred feet, the depth of its channel from top of natural banks to river bed is twelve to eighteen feet, with here and there reaches of much greater depth. Bank lands show a light slope away from the general course of the river, except at a few points already noted, where the west-side high plains extend to the river bank. The bottom of the river bed shows a firm clay, exposed in a few places, but it is generally composed of clean sand. River banks are quite firm soil, having but little tendency to cave. They are but lightly wooded as compared with the banks of the upper Sacramento.

The land upon either side of the river subject to periodical flooding is generally open country, throughout which clumps of willow mark the

alignment of the sloughs. Tule grows in spots where high bank lands of sloughs have penned in water. Oaks are dotted over some portions of this region, but rarely in dense groves.

Lower river reclamation works do not extend above the mouth of the Stanislaus River on the east side, and there are none on the west side in this division.

Just below Firebaugh, alongside of some of the irrigation canals belonging to the Miller & Lux possessions, are broad embankments, or levees, which protect portions of their lands. These levees, like the east bank levees near Las Juntas, are local protection works. They reduce the flood-basin area of the river a little, but are as yet of too small extent to produce a perceptible effect on the flood phenomena of the lower river.

Among the sloughs leading off from the river toward the west, all of which are high-water reliefs, into the west-side flood basin, the most notable are: Dos Palos, Posey, Temple, Santa Rita, and Salt Sloughs. Of these, Posey and Temple Sloughs are furnished with headworks, and at ordinary stages of the river the inflow of water into them is controlled. Salt Slough has a free outfall into the main channel of the San Joaquin River, about six miles above Hills Ferry. The head of Dos Palos Slough has been closed. It receives a portion of the water of the San Joaquin and Kings River Canal for distribution to low-lying pasture lands.

Irrigation is practiced to some extent from each of the above named sloughs, except Salt Slough.

At the low-water stages of San Joaquin River, no effort is spared to divert its entire low-water flow into the San Joaquin and Kings River Canal, and into the sloughs above mentioned, which are used as feeders for irrigation works. Navigation interests do not suffer materially from this practice, because navigation in this part of the river ceases before the flow of the river has decreased to its minimum, and because the navigability of the lower river depends upon the fact that it is within the tidal influence, where river bottom lies sufficiently deep below the low-water surface of the bay, where, therefore, a small accession to its water would not result in any marked betterment.

In this division, San Joaquin River receives three important tributaries: Merced River, from the east, at Hills Ferry; Tuolumne River, from the east, at about five miles below Grayson; and Stanislaus River, also from the east, about two and one half miles above San Joaquin City. Each of these rivers descends from the summit of the Sierra Nevada, and has a flow westward across the broad east-side plain of San Joaquin Valley, resembling in character the upper San Joaquin River, already described.

None of these streams at their confluence with San Joaquin River are, to any great extent, different in character from the main drain of San Joaquin Valley, and none of them modifies the general character of San Joaquin River, as the same has already been briefly described.

Where the San Joaquin River reaches the lower end of this division, its waters are hemmed in from the east by a mainland levee which commences at high land some distance south of Stanislaus River, follows the bank of Walthall Slough, and extends thence northward along the east bank of San Joaquin River. Toward the north, on the west side of the main channel of the river, the Roberts Island and Union Island levees are a barrier to flood waters. The effect of these reclama-

tion works is that at all high stages of water, overflow must result freely toward the west. Repeated overflow in this direction has caused the formation of such crevasses as Paradise Cut, which, by means of a union with one of the feeders of Tom Paine Slough, has almost been transformed into a river delta channel.

But the water flowing thus westward does not all flow out through Paradise Cut. The spilling over is general all along the west bank when the water has risen sixteen feet above the low-water plane. Barely less water, though at a trifling higher elevation, would thus flow over natural banks if Paradise Cut were entirely closed; and if this crevasse were closed, then it would be but a little while before outgoing waters would cut a new one. The tendency to seek relief westward in the most direct line to tide water is very great near this point, and this tendency needs intelligent direction. Here, as elsewhere, the only policy which should prevail is to make the river channel carry as much water as possible, and to prevent the outgoing water from concentrating at one point of outflow, where it would then work injury to the river channel immediately below. In other words, in place of one point of outfall there should be several in this vicinity, and none should draw upon the river until the river flows at its utmost capacity. Combined with such treatment of the river at this point, which system is the best that can be advocated in the interest of navigation, there should also be provision made for a rapid delivery of the outgoing waters to Suisun Bay.

The river, in its entire course from Las Juntas to the head of Old River, is a very tortuous stream, yet withal, a stream of considerable permanency of alignment. This condition of permanency, due to the stability of the river banks, together with the light gradient of the river, points toward a system of river treatment looking, above all things, to a permanent improvement of the river alignment, to a cutting off of bends, and a shortening of the river channel. Such treatment would result in the more rapid delivery of flood waters to the lower end of this division of the river, and would be of great aid to navigation interests.

This work of channel rectification should be undertaken without delay. But the plans of works must emanate from a Board of Engineers, composed in part of United States Army engineers, and no time should be lost in perfecting them, in order that land owners may have information of proposed changes, and may adapt private schemes of river improvement and land reclamation to the proposed general plan of works.

The length of the river from Las Juntas to Hills Ferry is seventy-three miles. It falls in this distance one hundred and six feet. The air-line distance between the same two points is fifty miles. The best possible alignment of the channel between the two points can not, therefore, increase the average fall per mile to more than 2.1 feet, and the establishment of this gradient would not interfere with the river's navigability.

The length of the river from Hills Ferry to Old River is seventy-three miles. The total fall of the water surface between these two points is forty-four feet. The average fall per mile of the river is 0.6 feet. The air-line distance between the same two points is only thirty-seven miles. Alignment corrections cannot increase the average fall per mile to more than 1.19 feet, which would be the fall along the direct line.

In the whole course from Las Juntas to Old River, the San Joaquin

River never departs more than a few miles from a straight line connecting these points; yet, the river's length exceeds the length of the straight line by about sixty miles. A reference to any of the recently published maps showing this part of San Joaquin River is all that is necessary to demonstrate the feasibility of river improvements in the form of cut-offs, which would be an advantage alike to navigation and drainage interests, when the latter are not considered from the standpoint of local interests.

In reporting to Colonel G. H. Mendell upon the upper San Joaquin River, under date of June 28, 1883, Mr. Wm. P. Smith, Assistant Engineer, says:

The term Upper River is applied to that portion of the San Joaquin above Stockton. Hills Ferry is ninety miles above Stockton, and is generally considered the head of navigation. In an average season, boats run to this point for about six months. Above Hills Ferry the river is very narrow and crooked, but for a few weeks boats have gone at the highest stage of the water to Firebaughs Ferry, one hundred miles or more further up stream. * * *

The trouble with this river for six months of the year is scarcity of water. If all the water was gathered into one channel fifty feet wide, we would not have a depth of six inches in many places. The bed of the river is sand except in two places—at the mouth of Orestimba and Puerta Creeks—where gravel bars are found.

3. THE DELTA CHANNELS OF SAN JOAQUIN RIVER.

Head of Old River to New York.

At a point about sixty-four miles above the river mouth, as measured by the channel of the main river, San Joaquin River separates into two branches, Old River breaking out toward the west. At about four miles below its head Old River again separates into two channels, of which the one of least capacity, the left hand branch, retains the name of Old River, while the other is called Middle River. The Old River branch flows westward for about fifteen miles, and then flows northerly to a reunion with the main river just above Bouldin Island. Middle River holds a general northwesterly course, increasing from a very small waterway to a broad expanse of water as it flows to the main river at Mandeville.

At the low-water stage Old River is dry at its head. Tides play back and forth up to above Tom Paine Slough, only eight miles from the head of this waterway. In the channel of Middle River their effect is felt to its very head, there being a few inches of water in its bed at this point at high tide, and none except in holes at low tide.

The Main Channel.

All of the several arms of this division of San Joaquin River lie within the original tidal basin, that is, within the district over which, at certain stages of the river, tidal influence extended.

Between the several river arms already named lie Roberts, Union, Bacon, Rough and Ready, and Mandeville Islands. All of these are for the most part of that character of land described in the chapter on the river deltas. High rim lands—that is, relatively high lands—encompass the lower-lying, peat-covered interior portions of the islands. The waters of the San Joaquin are not naturally heavily charged with silt, consequently the building up process has been slow. In the original condition of the river these bank lands were periodically overtopped;

the tule lands were a vast inland sea for months at a time before levees were built around them to keep off the water. At high stages the river had a partial, at very high stages almost its complete, outfall or delivery of water into this sea across banks near the head of Old River. We find it perfectly natural, then, that the river waterway below this point is inadequate to pass even ordinary floods. It could not have been otherwise. The land reclamation works, which have rarely been intended to accomplish more than to prevent inundation along the water frontage of the land to be reclaimed, without, in most cases, the slightest regard for the requirements of a general valley drainage system, have here as elsewhere set a barrier directly across the line of such cross-country flood flow.

We have no unfavorable criticism to make of the local energetic efforts that have been put forth to make large tracts of land cultivable, but it is to be regretted that drainage works for the purpose of land reclamation were not planned by the State authority, and carried out by the State, before the land thus requiring drainage was sold to private owners.

The levee system of the islands above named, together with that on the mainland east of the river, must, as already explained, throw a large portion of the river flood waters westward into the Tom Paine Slough country, and into Old River, which is inadequate as a waterway at such times. Scant rainfall, and the large proportion of seasons when the rainfall is below the average (together with the fact that intervals of ten to forty years in which the river receives no water from Tulare Lake and the upper third of its drainage basin, seem to be the rule rather than the exception), make the river's flood stages of rare occurrence. To this peculiarity of the river's flow we must attribute the fact that for many seasons some portions of the islands have appeared to be well protected by the reclamation works as they have been gradually evolved to their present condition. Reasonable security from overflow at flood stages of the river cannot be had under the prevailing system of river treatment for the whole region bordering upon the river, and when the spirit of improvement moves the main land owners to the west of San Joaquin River above Old River, to construct the usual reclamation works, then injury to existing works must be a little more frequent than heretofore, because for the same flood volume, water heights in the river channel must be higher. It would be folly to attempt to disguise this situation. It is better for all those interested to have a clear understanding of it. The small, though protracted, high water of this spring, which overtopped Union Island levees, and broke those of portions of Roberts Island, received no accessions from the Tulare Lake region. It was a high-water stage, due to slowly melting snow, retarded by a cool spring. There was no rush of water. It rose gradually and held its height above banks from March to the middle of July, fluctuating within a limit of only fourteen inches at the railroad bridge west of Lathrop during this whole time.

We have thus again laid stress upon the fact that the natural waterways, even when flanked by reasonably high and well constructed levees, are not everywhere in the San Joaquin and Sacramento Valleys sufficient to carry flood volumes, in order that too close an analogy might not be drawn between these rivers and the Mississippi, or the many delta streams of Europe, where, in most cases, it has been fairly well demonstrated that even where this peculiarity was claimed for such rivers, it

did not exist, but that, on the contrary, well built levees not too close to bank lines have afforded reasonable security from overflow.

The existing waterways throughout large parts of the Sacramento and San Joaquin Valleys are adapted to a flow many times less than the flood flow down the valley. The valley itself in the delta of the two rivers has been raised barely above sea level. Five hundred square miles of it were, at flood-stages of the rivers, converted into a sea (before levees were built) into which the rivers delivered their waters. Time sufficient has not elapsed for the river silt to build banks high enough to close the many delta sloughs and establish one great waterway for each valley. Yet this would have been the result after ages more of river land-building.

It thus appears that we are dealing with incomplete river channels—channels whose capacity has by Nature been adjusted to lesser volumes of flow than they should carry to accomplish satisfactory delivery of their waters to the bay. River improvements should therefore all be made with a view to aiding Nature in the work of channel building, and care must be taken that works of local improvement do not result in general injury.

The main channel of San Joaquin River in that part of this division above Rough and Ready Island, in a length of thirteen miles, has an average width of about one hundred and eighty feet. The river banks are low and firm; they are composed of soil well matted with roots of tule, willow, blackberries, and wild roses. Banks are almost vertical, and rarely show any tendency to cave, not even since the levee system, by raising water levels and keeping them high for longer periods, has increased the scouring tendency of the water. The bottom of the river is composed of sand. Sand bars, which become obstructions to navigation at low stages, lie below points, and form shoals in long, straight reaches.

No material change in the general character of this division of the river has taken place in the last thirty years, except where artificial cuts have been made through long points of land.

In its course from the head of Old River to Rough and Ready Island, the river has a length of over thirteen miles, while the distance in a straight line is but little more than nine miles. Its course is such that there are a number of bend corrections which could be made with advantage alike to drainage and navigation interests.

At the head of Rough and Ready Island the river again separates into two channels, of which the lesser is Burns Cut-off, which flows to the westward of Rough and Ready Island, and reunites with the main stream at Wakefield.

About a mile below the head of Burns Cut-off the river is joined from the east by Stockton Channel. Stockton Channel and its branch, Mormon Slough, are both navigable for some distance eastward from the river. These sloughs, as they are generally called, are Stockton's navigable waters.

Below Stockton Channel are the so called "Narrows." Here the river, still in a narrow channel, has a very tortuous course, which has been greatly improved near the lower end of Rough and Ready Island by the construction of three cuts at Government expense. These cuts have now become the river channel, and the old river arms have been rapidly filling with silt.

After its reunion with Burns Cut-off, San Joaquin River gradually widens. It has low tule-covered, non-erosive banks. Sand bars now, as thirty years ago, occasionally impede free navigation. As shown by the following extract from a report to the Secretary of War, by Col. G. H. Mendell, there has been a recent deposit of silt in the lower reaches of the river:

1. A careful comparison of the charts of San Francisco entrance bar, made in 1855 and 1873, shows that the bar had suffered no injury in that interval.

2. A comparison of surveys of the ships' channel of a portion of San Pablo Bay, made in 1855, 1863, and 1878, shows that between 1855 and 1863 no deposits of much importance were made in the channels.

The surveys of 1863 and 1878 are distinguished by a deposit of seventy-six million twenty-five thousand cubic yards, made in the interval. The depth of deposit averaged over the area of comparison twenty-four and one third square miles, would be three and one tenth feet. The deposit, however, did not occur in the shape of a layer of uniform thickness. It occurs mainly on the flanks of the channel, and has the effect to narrow the channel, without affecting to any noticeable extent the ruling depth. The mean reduction in width of channel between the eighteen-foot contours, obtained by comparison of six cross-sections, is two thousand eight hundred and twenty feet, which is twenty-two per cent of the mean width of 1855.

This comparison includes only the channel. The shoal-water areas were necessarily excluded from comparison, owing to the fact that no survey of them had been made since 1855.

3. A comparison of maps of three and one half miles on the Sacramento, near its mouth, and one mile at the mouth of the San Joaquin, shows a deposit of two million cubic yards in the Sacramento, and five hundred thousand in the San Joaquin, between 1867 and 1878.

The comparison of charts of Suisun Bay, made in 1867 and 1878, shows an extension in area of the shoals, which have not yet been measured in a detailed way.

A comparison of charts of Carquinez Straits during different dates indicates the formation of large deposits in recent years.

From Rough and Ready Island to its mouth the river is forty-six miles long; the distance between the two points in a straight line is only twenty-seven miles. It is hardly necessary to say that bend corrections in this part of the river would benefit navigation, and would also aid rapid delivery of flood waters to the bay, thereby facilitating the drainage of all lands at points above, and particularly in the vicinity of Stockton. Not only are bend corrections desirable, but they are feasible. The winding course of the river is such that at a reasonable outlay the entire alignment of this part of the river could be made very satisfactory.

The increase in width of the river, as it nears its outfall into Suisun Bay, where the tidal flow of water, as already explained, has kept open a very large waterway, is best illustrated by a few figures:

The average channel width, close below Burns Cut-off, is three hundred feet; it is four hundred feet below Twenty-one-Mile Slough; it increases to about one thousand two hundred feet at the mouth of Middle River; and thence to the mouth of Old River the channel has an average width of one thousand six hundred feet, and widens to over two thousand feet before reaching Suisun Bay.

Middle River reunites with it thirty-six miles below the head of Old River; Old River reunites with it five miles further toward the bay. It receives the water of Mokelumne River from the north about one and one half miles below the mouth of Old River. False River, Twenty-one-Mile Slough, Fourteen-Mile Slough, Black Slough, etc., are feeders of the tidal basins lying beyond the higher rim-land adjacent to the river. Three-Mile, Seven-Mile, Connection, Little Connection, Potato, and other sloughs, are waterways belonging to the delta system of the two great rivers, and require no detailed description at this time.

For information concerning distances and slopes reference is made to the table on pages 98-100 of this report. It remains to be said that while a remarkably rapid rising of the low-water plane, in the case of Sacramento River below the mouth of Feather River, is a recent phenomenon of note on that stream, there could not be found any evidence tending to show a similar change on the San Joaquin River. Tidal influence still extends to Stockton, and, as already stated, to a point in the main river eighteen miles above Stockton.

Low water at Stockton is only 3.20 feet above the low-tide low-water plane of Suisun Bay.

From low tide to high tide at Stockton, at low stages of the water, is about two feet.

The following table is compiled from data in the office of the United States Engineer Corps, and in the office of State Engineer:

Old River.

If the history of the formation of Old River were known it would be found to be very similar to that of Paradise Cut and Tom Paine Slough. It became an arm of the river when the water, breaking over the west bank of San Joaquin River, toward the depression or trough on the west side, cut a channel from the river bank to the head of one of the many tidal sloughs which ramified through the low tidal basin. The waters, as they followed lines of least resistance, did not give to Old River a very direct alignment. The general course of the upper portion of the river is very nearly at right angles to the course of San Joaquin River, but its many bends give the original channel a length of about twenty-one miles between points only eight miles apart in a straight line.

Its alignment has, however, by interested private parties, who are desirous of having the river make as quick a delivery of its waters into Suisun Bay as possible, been considerably improved at points above Mohrs Landing. Salmon Slough Canal and Salmon Slough, one and six tenths miles long, have been substituted for about three miles of river channel. Other cuts, aggregating in length five thousand eight hundred feet, have reduced the river's length ten thousand eight hundred feet. But these cuts, like the upper river itself, are of small capacity, generally only sixty feet in width, and are in the aggregate but small aids in the delivery of Old River water, and of the general overflow of San Joaquin River just above Old River, to the lower, more capacious portions of Old River. These works are to be commended, but it should not be left to private enterprise of those locally interested to carry out works for the general good.

Along this part of Old River the soils are a firm loam or clay. A yellow clay lies below the surface soils, and erosion is slow. Caving banks are rare. The river flows on a firm clay bottom to near the mouth of Tom Paine Slough, and thence it has a sandy bed.

The bed of Old River, from its head to Middle River, in a distance of four miles, has a fall of about two feet. Its bed is from one to two feet above low water at its head. The average channel width in this distance is less than two hundred feet.

From Middle River to Tom Paine Slough the river is four miles long, and has an average width of one hundred feet. It has no low-water flow except the ebb and flow of the tide, consequently its low-water stage here varies but little from mean tide in Suisun Bay. Its low water is at the elevation of four and two tenths feet at Tom Paine Slough.

The narrow channel of Old River does not commence to widen until Italian Slough is reached, which enters from the west about eleven miles below Mohrs Landing. Mohrs Landing is nine miles below the mouth of Tom Paine Slough, and between these two points the average width of the river is one hundred and twenty feet. It is about one hundred feet from Mohrs Landing to Italian Slough. But the character of the river has changed materially in flowing from Tom Paine Slough to Mohrs Landing. The firm bank land has gradually merged into lighter peaty material. The oak-covered plains adjacent to the river have given away to low tule flats, and the river carries a sufficient depth of water to be navigable at its low stages.

Below Italian Slough the river widens to three hundred feet, as the average, for a distance of fifteen and one half miles, down to Connection

Slough, and its depths, too, increase, thirty to forty feet being not unusual at the low-water stage.

The average channel width below Connection Slough to the mouth of Old River, a distance of ten miles, is very nearly eight hundred feet.

In the lower reaches of the river mud takes the place of sand found in the river bed above. The banks continue low and are covered with tule.

Without describing the reclamation works along the channel of Old River in detail at this time, it can be stated in general terms that the main land to the west of Old River is practically unprotected, while on the Union and Roberts Island side, the river is paralleled by the levees which form parts of the reclamation works of these islands.

Below Union Island Landing (Connection Slough) the river is practically without levees, and water still ebbs and flows across its low banks.

Among the tidal sloughs which join the river from the west, and which are the waterways in the tule flats for the Coast Range water from points lying opposite them, Italian, Indian, and Sand Mound Sloughs are the most important. They are all deep waterways at their mouths, and are flanked by tule flats.

The following table is from State Engineer surveys of 1878. (For table of distances and water elevations, see pages 98-100):

OLD RIVER.
WIDTHS AND GRADES.

	Connection Slough to Mouth of Old River	Italian Slough to Connection Slough.	Mohrs Landing to Italian Slough.	Tom Paine Slough to Mohrs Landing	Head of Middle River to Tom Paine Slough	Head of Old River to Head of Middle River
Distance, in miles	10.0	15.4	11.3	9.3	3.9	4.2
<i>Low Water, 1878—</i>						
Total fall, in feet	0.52	0.88	0.67	1.23	0.75	0.65
Average grade per mile, in feet	0.05	0.06	0.06	0.13	0.19	0.15
Maximum grade of any five miles, in feet				0.15		
Minimum grade of any five miles, in feet				0.07		
Maximum grade of any one mile, in feet				0.23		
Minimum grade of any one mile, in feet				0.05		
<i>High Water, 1878—</i>						
Total fall, in feet		1.45	2.15	4.60	1.80	2.15
Average grade per mile, in feet		0.09	0.19	0.50	0.46	0.51
Maximum grade of any five miles, in feet			0.25	0.60		
Minimum grade of any five miles, in feet			0.12	0.35		
Maximum grade of any one mile, in feet			0.27	0.75		
Minimum grade of any one mile, in feet			0.10	0.32		
Average width of channel, in feet	780.	300.	100.	120.	100.	180.
Widest average for any one mile, in feet	820.	410.	110.	150.	105.	200.
Narrowest average for any one mile, in feet	625.	200.	95.	90.	90.	150.

Middle River.

About four miles below the head of Old River, Middle River breaks out toward the north. It flows northerly about four miles, thence westerly, and again northerly to a reunion with the main stream.

It has a total length of thirty-one miles, and, as already stated, is practically dry at its head, at its low-water stage. Its character does not vary greatly from that of Old River below Mohrs Landing. The firm bank land at its head gradually merges into a lighter, peaty material. Its channel gradually increases in width from an average of seventy-five feet in its upper reaches, to about one thousand two hundred feet in the lower part of its course. Levees have been set upon both banks of this river on Union and Roberts Islands, and these levees generally closely follow the river bank.

Below the lower end of Union Island, on the left bank of the river, there is practically no levee, and none is maintained on either bank near the river's mouth.

Among the many sloughs maintained by tidal scour, as already explained, the principal ones tributary to or putting out from Middle River are Connection and Latham Sloughs. Connection Slough, in a very tortuous course, connects Middle River at a point one half mile above its mouth with Old River, ten miles above its junction with the main river.

Fourteen-Mile Slough	222,100	42,064	7,700	1,458	2.29	8.71	0.28	0.088
Twelve-Mile Slough	220,800	43,623	9,100	1,723				
Ten-Mile Slough	238,900	45,246	2,800	0,530	2.52	10.06	1.35	0.589
Wakefield, mouth of Burns Cut-off	241,700	45,777	6,300	1,193				
Mouth of Calaveras River	248,000	46,965	14,400	2,728	3.20		2.15	0.445
Stockton Channel	262,400	49,697	4,600	0,871				
Head of Burns Cut-off	267,000	50,568	15,000	2,841				
Mouth of French Camp Slough	282,000	53,409	3,000	0,568				
Lindstroms Ferry	285,000	53,977	10,300	1,951	4.28	15.81	3.57	0.174
Brownells	295,300	55,928	11,700	2,216			9.49	0.603
Fishers Landing	307,000	58,144	6,000	1,136				
Freewarts Ferry	313,000	59,280	14,200	2,690				
Fair Oaks	327,200	61,989	9,300	1,761	5.64	20.24		
Head of Old River	336,500	63,731	4,600	0,871				
Johnsons Ferry	341,100	64,602	9,000	1,705	6.09	21.70		
Central Pacific Railroad Bridge	350,100	66,307	5,000	0,947			2.90	0.848
Mouth of Walthall Slough	355,100	67,254	13,050	2,472				
Paradise Cut	368,150	69,725	4,350	0,824	8.99	23.33		0.476
Williams Landing	372,500	70,549	22,000	4,167	9.3	23.72		
Kasson Landing	394,500	74,716	26,100	4,944	10.6	25.5	1.8	0.432
Kasson Cut	430,600	79,680	2,900	0,548	12.1	27.6		
G. W. King	423,500	80,208	13,800	2,614	12.3	27.8	2.3	0.419
Durham's Ferry	437,300	82,822	4,700	0,890	13.1			
San Joaquin City	442,000	83,712	12,900	2,445	13.3			
Mouth of Stanislaus River	454,900	86,155	57,700	10,928	14.0		7.9	0.723
Mouth of Tuolumne River	512,600	97,083	28,300	5,360	21.9		3.2	0.598
Grayson	540,900	102,443	36,000	6,818	25.1		4.4	0.645
Pattersons Ford	576,900	109,261	22,000	4,167	29.5		2.6	0.624
Pattersons Landing	598,900	113,428	38,400	7,272	32.1		5.3	0.729
Carpenters Ferry	637,300	120,700	38,100	7,217	37.4		5.6	0.776
Grows Upper Landing	675,400	127,917	16,200	3,068	43.0		2.0	0.652
Kilburns Landing	691,600	130,985	30,800	5,833	45.0		4.7	0.806
Mouth of Merced River	722,400	136,818	1,500	0,284	49.7		0.3	1.056
Hills Ferry (Upper Warehouse)	723,900	137,102		*12.0	50.0	66.5	12.0	1.000
Dover		149.1		*8.0	62.0		8.0	1.000
Chester (Dickersons Ferry)		157.1		*43.0	70.0		67.0	1.558
Firebaugh		200.1		*9.5	137.0			
Juntas, or mouth of Fresno Slough		209.6		*8.0			91.0	2.000
Head of Chowchilla Canal		217.6		*29.0	228.0		89.0	4.341
Sycamore Railroad Bridge		245.6		*19.6				
Head of Upper San Joaquin Canal		265.2		*0.7				
Hamptonville		265.9		*3.7	317.0		20.0	5.406
Fort Miller		269.6		*3.1	4337.0		27.0	8.710
Fine-Gold Gulch		272.7		*2.1	4364.0		39.0	13.810
At the bend, Sec. 36, T. 10 S., R. 21 E.		274.8			4403.0			

SAN JOAQUIN RIVER—Continued.

LOCATION.	DISTANCE FROM MOUTH OF RIVER.		DISTANCE FROM STATION TO STATION.		Elevation Low Water—Feet	Elevation High Water—Feet	LOW WATER, 1878.		HIGH WATER, 1878.	
	Feet.	Miles	Feet.	Miles			Difference in Elevation, Station to Station—Feet	Fall per Mile—Feet	Difference in Elevation, Station to Station—Feet	Fall per Mile—Feet
Via Old River.										
Mouth of Old River	123,750	23.438	7,250	1.373	0.87	8.16				
Washington Slough	131,000	25.000	11,000	2.083						
Sand Mound Slough	142,000	26.894	34,000	6.439						
Connection Slough	176,000	33.333	6,250	1.184						
Hayes Landing	182,250	34.517	500	0.095						
Holman Slough	182,750	34.612	16,050	3.040						
Fugitt Slough	198,800	37.652	200	0.038						
Bacons Landing	199,000	37.690	32,500	6.155						
Indian Slough	231,500	43.844	2,300	0.436						
Union Island Landing	253,800	44.280	24,200	4.853						
Italian Slough	258,000	48.864	59,000	1.117						
Mohrs Landing	317,000	60.038	18,750	3.551						
M. Lammers	335,750	63.589	11,150	2.112						
River Station, 638+400	346,900	65.701	25,100	4.754						
Mouth of Salmon Slough	372,000	70.455	15,040	2.848	3.36	12.49			0.85	0.239
Head of Middle River	387,040	73.303	4,060	0.769		13.87			1.38	0.653
Grants	391,100	74.072	18,000	3.409		16.46			2.59	0.545
Head of Old River	409,100	77.481							3.78	0.538
Via Middle River.										
Mouth of Middle River	149,000	28.2			0.98	8.19				
Connection Slough		28.7		0.5						
Latham Slough		32.2		3.5						
Hayes Slough		37.0		4.8						
Beaver Slough		39.8		2.8						
Union Island Canal		42.5		2.7						
Old Fish Camp Slough		48.2		5.7						
Millers Ranch		54.4		6.2						
Head of Middle River		59.0		4.6		17.99			9.80	0.318

* Approximate. † Water surface, April, 1879.

MISCELLANEOUS NOTES.

On July 13, 1890, we found that the head of navigation in Sacramento River was at the Swifts Point warehouse. The river was at that time one and one half feet above the preceding low-water stage at Red Bluff, six feet above it at Colusa, and twelve feet above it at Sacramento (gauge reading at the latter point twenty feet). Just above the warehouse a broad gravel bar had formed from bank to bank diagonally across the river, over which the water spread and flowed in three small channels with less than two feet of water.

The small steamers in use on the upper river running light could not cross this bar, and could not, therefore, reach McIntosh Landing, the usual head of low-water navigation.

In the river below this point, the shoals where the river had too great low-water width were numerous, as were, also, snags which interfered with navigation. The United States snag-boat had not then commenced operations for this season.

At Colusa the waterfront continues to cave. In the upper end of that town, bank protection is immediately necessary to prevent a caving of the town levee into the river. Just below the town, where the river bank is soft, the levee has in some places been almost entirely caved down the bank.

There are many other places, as in the Hamilton Bend above Colusa, and some three miles below Colusa, where continued caving of the river bank will destroy the levee, but in no case are the property interests at stake so great as at Colusa.

At the first rise of Sacramento River last winter, which followed the moderate rainfall of the early part of December, the water rose at Sacramento to an unprecedented height. It did this because the levees along the western side of the river held the waters to their crests. The water was thus held by the levees on both sides of the river below Sacramento, and by the west-side levees above Sacramento, long enough for the Sutter and American flood basins to become filled. When the water lacked but one half inch of reaching the twenty-seven-foot mark on the river rod at Sacramento, a breach in the levee just below Sacramento, on the west side of the river, occurred, and rapidly widened to about eight hundred feet. This crevasse is known as the Paine Break. By reason of the rapid supply of water to the river two miles above this point, across banks from American Basin, and to American Basin from Sutter Basin, this crevasse lowered the water surface at Sacramento very slowly, after the first sudden depression of the water surface of about one foot had taken place, at points near the break. Five days later the water was only three feet lower than at its highest stage. During the first rush of water toward the crevasse, the current past Sacramento became very swift. It flowed at a rate of over twelve feet per second in midstream, and after the water had fallen to about twenty-two and one half feet on the rod, it still had a maximum velocity of nine feet per second. Opposite the crevasse, which occurred in a concave bend of the river, a sand bar formed rapidly, and its crest two fifths of the way out from the east bank of the river, on the fifth day after the crevasse had occurred, was almost at the water surface. The

eddies close in shore, just below the break, had eroded the river bottom to a depth of over sixty feet, while at a little distance below the break a general fill from bank to bank was observed. A few days after these observations were made, at the time of an official examination of the break by Colonel G. H. Mendell, it was found that the bar opposite the break had been eroded; there were twelve feet of water on it. The water flowed smoothly through the crevasse, while several days before it rolled through with high waves. Fears were entertained that the river might at this point leave its present channel, and plans, based on a special survey made by Major W. H. Heuer in the latter part of December, 1889, were made, for a partial closure of the crevasse. The work, as originally contemplated by the United States engineers, provided for the construction of a brush mattress or sill from levee end to levee end, and to this work, which was carried out this spring, more brush work was subsequently added for the purpose of reducing the volume of outflowing water. All of this work was done by and at the expense of the general Government.

The crevasse was thus closed with brush, held by piling, and weighted with bags of sand, to an elevation of the water surface corresponding to about twenty-three feet on the rod at Sacramento, and it is still in this condition. Unless reinforced by earth-filling to a complete closure of the gap in the levee, or by some adequate protection against the erosive action of overfalling water when the river rises this winter, there is every probability that this work will in whole or in part then be swept out.*

Nowhere on California's river system are the protection works better constructed or maintained than in the vicinity of Marysville and along portions of the west bank of Feather River.

Marysville is completely surrounded by levees. Not only has provision been made to confine Yuba River water to the space now allotted to it, averaging about two miles in width, from the hills to the river's mouth, but back levees are maintained to prevent the water from accumulating in the pocket between Feather and Yuba Rivers, and entering the city, which lies in the lowest portion of this pocket.

Levee building along the north bank of the Yuba has kept pace with the rising of the sand. The general height of the levee is about fourteen feet above the general surface of the plain, and about nine feet above the general surface of the river bed, if the whole space between Yuba River levees may be designated as its bed. The levee crest is raised from time to time, in order to keep it three to four feet above high water. The limit of this levee building will, however, soon be reached. The time is close at hand when better protection can be afforded by reducing flood heights, by channel building, by securing a better outfall for Feather and Yuba Rivers, than by adherence to the present system of levee building. Unless the tendency of Yuba River to cut a channel be encouraged and controlled, peculiar conditions may, however, result, that may bring disaster when least expected.

Yuba River, in the ten miles next above its mouth, has an average fall of about six feet per mile. It flows in broad, very shallow channels of sand, between clumps of willow and cottonwood.

* Since the above was written it has been learned that the brushwork is now being backed by earthwork, at the expense of Yolo County and interested land owners.

The sand, when covered with water, is in a condition that may be called about semi-liquid, and has a strong tendency to form deposits, horizontal on lines at right angles to the direction of the water's flow. The course of the high-water channel of the river is uncertain, and it not infrequently happens that, after approaching one river levee, it turns from the same in a direction almost at right angles to the direction of the levee and to the general direction of the river. When this occurs, as at the Dr. Teegarden place last winter, the result is that there is a massing and banking up of sand below the point where the river channel is close to the levee, until the sand and the river water are as high as at the opposite point of the high-water channel. This latter point may, however, be up stream a half mile or more, and three to ten feet higher. Phenomenal high waters at certain points of the levee system may thus result.

The Yuba River levee and other levees on which Marysville relies for protection against overflow, are carefully maintained, and the importance of a careful and continuous levee patrol system has been recognized by those in charge of these protection works. A growth of willow and alder trees has been encouraged on the river side of the levees, and deposit of sand has been hastened there also, by the construction of numerous light spur dikes.

The levee work of Reclamation District No. 1, and of District No. 9, on the west bank of Feather River, is also to be commended. The levees are broad, usually having a wagon road on top. They rise to an average height of about ten feet above the general surface of the ground, being much higher where they cross depressions, and they are well maintained. Here, more than elsewhere, it is beginning to become apparent that there may be a limit to the utility of levees as protectors against injury from high-water stages of the rivers. Owing to the protracted high stage of Feather River, due to the lack of a proper out-fall point rather than to excessive volumes of water, seepage kept the western bank lands of Feather River, during the last winter and spring, saturated with moisture. Water stood in pools, collected in depressions, and flowed toward Sutter Basin. In July it was estimated that 50 per cent of the trees in the Abbott and Phillips orchard of four hundred acres, on the west side of the river, had died from this cause. This injury to land from excessive seepage extended westward to Yuba City Slough.

About one and one half miles above Nicolaus, on the right bank of Feather River, is the head of Nelson Slough, a high-water escapeway which has been allowed to remain open. Its flow is toward and into Sutter Basin. In the right bank levee, about two miles below Nicolaus, several crevasses occurred last winter, and the strong flow of water into these during the medium and high stages of the river proved a serious obstruction to navigation. Fears were expressed by interested parties that the river would here change its course, and flow directly into Sutter Basin. At the time that this locality was examined, the water in the river was just at the top of natural banks. It had a depth of about three feet in the river channel near the crevasses, and flowed through the upper crevasse with a depth of about one and one half feet, and through

the middle or main crevasse four to six feet deep. The third break in the levee was small, and no water was flowing through it. These three crevasses are in a concave bend of the river, where the levee is only forty to sixty feet from the edge of the bank. The second is separated from the first by about four hundred feet of levee, and from the third by about six hundred feet. The first and second are each about two hundred feet wide, the third only about sixty feet. The water flowing through them is delivered into Nelson Slough, which is only six hundred to eight hundred feet from the river, and thence flows into Sutter Basin. About one third of the water in the river was diverted through these openings at the time they were examined, but when the river was four feet higher two thirds of the river's flow may have passed through them.

Paradise Cut, in the west side of San Joaquin River, was visited on July 17, 1890. The weir there constructed in 1888 has been washed out. The cut appears to be of about the same width as in 1878. More water seemed to flow through it toward the west than down the main channel of the river just below the cut. This crevasse is located in a concave bank at a point where the river makes a turn of nearly 90 degrees to the right.

In the river-reach just below the cut, with the river at a bank-full stage, we found a minimum depth of seven and one half feet of water. The shoal below the cut extended down stream for about one thousand feet. Some water that had escaped from the river on the east side at points above Paradise Cut, reëntered again below the cut. The best local remedy for the evils resulting to navigation from this crevasse would probably be the closing of the cut to bank heights, and the opening of a cut-off across the neck of Williamson Point.

The following tables are reprinted from the volume of "Physical Data and Statistics," published by the State Engineer in 1886:

AVERAGE FLOW OF STREAMS.
FOR THE SIX YEARS—NOVEMBER 1, 1878, TO OCTOBER 31, 1884.

NAME OF STREAM.	AVERAGES OF MEAN MONTHLY DISCHARGES, IN CUBIC FEET PER SECOND.											
	Novem- ber.	December.	January.	February.	March.	April.	May.	June.	July.	August.	Septem- ber.	October.
Sacramento River.....	8,700	15,067	30,500	38,167	60,833	93,833	93,833	62,667	23,833	10,250	7,083	7,917
Cosumnes River.....	81	244	527	1,214	1,547	3,074	3,722	3,055	1,159	324	66	83
Dry Creek.....	24	115	276	613	667	830	250	83	5	1	2	12
Mokelumne River.....	123	292	469	1,261	1,607	3,226	3,911	3,296	1,252	269	74	113
Calaveras River.....	29	135	492	1,172	1,344	1,832	1,961	217	49	2	0	12
Stanislaus River.....	146	535	688	2,044	2,645	4,236	5,290	4,929	2,158	449	127	162
Tuolumne River.....	215	556	909	1,801	2,754	5,338	7,622	8,188	3,752	751	196	266
Merced River.....	183	456	590	1,587	1,784	3,264	4,528	4,340	1,973	504	188	210
Bear Creek.....	4	25	46	171	219	212	67	28	11	0	0	3
Mariposa Creek.....	3	20	36	129	162	122	50	22	8	0	0	0
Chowchilla Creek.....	9	45	78	339	535	466	172	136	45	3	0	0
Fresno Creek.....	0	64	123	392	568	475	194	143	45	5	0	0
San Joaquin River.....	387	792	1,054	1,945	2,133	4,252	8,663	10,156	5,144	1,355	555	495
Kings River.....	313	510	515	1,290	1,817	4,090	7,588	8,180	4,655	1,162	455	447
Kaweah River.....	113	208	263	662	810	1,896	1,816	1,939	980	271	139	97
Tule River.....	88	136	215	585	605	702	1,138	1,017	669	230	106	75
Deer Creek.....	13	26	49	124	143	131	75	29	1	0	0	4
White Creek.....	11	20	38	101	119	16	61	23	1	0	0	3
Poso Creek.....	34	64	126	325	384	345	198	75	2	0	0	5
Kern River.....	374	433	443	658	792	1,489	2,451	3,006	1,897	851	467	392
Caliente Creek.....	50	100	180	475	562	504	287	110	3	0	0	0

AVERAGE FLOW OF STREAMS.

FOR THE SIX YEARS—NOVEMBER 1, 1878, TO OCTOBER 31, 1884.

NAME OF STREAM.	AVERAGES OF MEAN DISCHARGES DURING PERIODS OF THREE MONTHS.				AVERAGES OF MEAN YEARLY DISCHARGES.	Area of Drainage Basin—Square Miles.....	REMARKS.
	I Period. Nov.-Jan.—Cubic Feet per Second	II Period. Feb.-Apr.—Cubic Feet per Second	III Period. May-July—Cubic Feet per Second	IV Period. Aug.-Oct.—Cubic Feet per Second			
Sacramento River.....	18,187	64,643	60,067	8,433	37,632	26,137	..... At Collinsville.
Cosumnes River.....	295	1,956	2,689	159	1,234	580	..... At Live Oak Suspension Bridge.
Dry Creek.....	136	704	113	5	237	283	..... At base of foothills.
Mokelumne River.....	296	2,038	2,841	152	1,321	687	..... At Lone Star Mill.
Calaveras River.....	221	1,465	4,411	10	620	491	..... At Bolleta.
Stanislaus River.....	469	2,411	4,189	247	1,958	1,061	..... At Oakdale.
Tuolumne River.....	1,279	3,365	6,519	663	2,685	1,501	..... At Modesto.
Merced River.....	411	2,219	3,934	301	1,631	1,076	..... At Merced Falls.
Bear Creek.....	26	201	47	1	65	166	..... At base of foothills.
Mariposa Creek.....	20	138	27	0	46	122	..... At base of foothills.
Chowchilla Creek.....	44	456	118	2	152	268	..... At base of foothills.
Fresno Creek.....	66	482	127	3	167	272	..... At base of foothills.
San Joaquin River.....	750	2,462	7,458	808	3,074	1,637	..... At Hamptonville.
Kings River.....	445	2,408	6,791	688	2,584	1,742	..... At Slate Point.
Kaweah River.....	196	963	1,574	169	723	619	..... At Wachumna Hill.
Tule River.....	130	636	1,941	139	451	437	..... At Porterville.
Deer Creek.....	29	134	35	1	49	110	..... At base of foothills.
White Creek.....	22	110	29	1	40	90	..... At base of foothills.
Poso Creek.....	73	352	92	2	145	289	..... At base of foothills.
Kern River.....	429	803	2,451	574	1,110	2,345	..... At Rio Bravo Ranch.
Caliente Creek.....	117	517	134	2	191	423	..... At base of foothills.

CALIFORNIA'S NAVIGABLE WATERS.

The United States Government exercises control over the navigable waters of California and takes charge of their conservation. The question of the navigability of any stream is a question of fact. It would seem to be necessary, therefore, in order to avoid conflict of State and United States authority, that the proper Government department should designate with precision which streams are to be considered navigable, and the limit of their navigability. This has not been done in California, neither do the United States engineers in charge of the preservation and improvement of navigable waters find it necessary to approve or disapprove of the plans for structures generally erected for public convenience, such as wharves and bridges, which may, if faultily constructed or awkwardly placed, become serious obstacles to navigation. It seems to be taken for granted that it is time enough to act when some structure has become an obstruction, and there is no doubt that its removal could then be effected.

State authority, on the other hand, in order to establish and enforce regulations for the maintenance of the rivers as public ways, has found it necessary to make a partial enumeration of streams which are to be considered public ways, and it has also made some provisions to prevent unnecessary obstruction of navigable channels. The State, through its State Engineer (or Surveyor-General), thus prescribes the width of clear opening for drawbridges over navigable rivers. In doing this it seems to be directing its agents to interfere with United States authority, for the United States engineers to whom the conservation of the navigability of the rivers is intrusted, are alone competent to pass upon the requirements in each particular case.

While the State requires that its officers, who are supposed to possess the necessary information, prescribe the required width of opening, no provision is made to secure a proper position of bridge openings, with reference to the navigable channel.

These are questions which, in every instance, should be fully passed upon by the United States engineers, and when once a plan of any structure has been approved by them, then the maintenance of the river channel leading through or past it should be at the expense of the general Government. If this had been the procedure in the case of the county bridge over San Joaquin River, just above the railroad bridge, west of Lathrop, then a good channel, from bridge to bridge, could have been maintained with much less difficulty than at present.

By statutory enactment, the State has declared that "navigable waters and all streams of sufficient capacity to transport the produce of the country are public ways, for the purposes of navigation and of such transportation."

It has further declared that the following streams and waters are public ways:

"Sacramento River, between its mouth and the mouth of Middle Creek."

This river is thus declared a public way to a point in Shasta County, far above Iron Cañon, and thirty to forty miles above the head of practical navigation. Its length to the mouth of Middle Creek is about three hundred miles. Steamboat Slough has a navigable length of eleven miles.

"Feather River, between its mouth and a point fifty feet below the bridge crossing Feather River, first above the mouth of the Yuba River."

The low-water flow of Feather River is over sand between sand bars. Its present low-water depth is only one to three feet. Its length to Marysville is thirty-one miles.

"Yuba River, between its mouth and a point at the mouth of the slough at the foot of F Street in the city of Marysville."

The length of this part of Yuba River is three fourths of a mile. Navigation of this river is no longer practical, until the sand now in its channel has been removed.

"Mokelumne River, from the point of confluence of said river with the San Joaquin River, to a point on said Mokelumne River one mile below the point where Dry Creek flows into said Mokelumne River, and no further." (Navigability was restricted to this part of the river by Act of the Legislature, approved April 3, 1880.)

The combined length of the two channels of this river below New Hope is twenty-nine miles. Its length from New Hope to one mile below the mouth of Dry Creek is five miles.

"San Joaquin River, between its mouth and the location of the San Joaquin Valley Railroad bridge, and the Stockton Slough between its mouth and the west line of El Dorado Street, in Stockton." (Declared navigable streams by Act of February 21, 1872.)

It is presumed that the railroad bridge near Herndon, twenty miles below Hamptonville, is here referred to. The river from this point to its mouth has a length of two hundred and forty-five miles.

Stockton Slough is two and a half miles long, and with it McCloud's Lake, and Miner and Lindsay Sloughs, as well as three fourths of a mile of the lower portion of Mormon Slough, which, together, give Stockton good inland harbor facilities, should have been declared public ways.

"Tuolumne River, between its mouth and Dickensons Ferry."

This river is thus declared a public way for several miles above Modesto, at which place it is spanned by two bridges not provided with draws. Its length from its mouth to Modesto is fourteen miles. It is navigable for this distance, but not at its low stages.

"Petaluma River, from its mouth to a distance one third of a mile above Washington Street, in the city of Petaluma."

"Sonoma River, between its mouth and a point opposite Fowler's Hotel, in the town of San Luis."

"Napa River, between its mouth and the toll bridge."

"Suisun River, between its mouth and the town of Suisun embarcadero."

This is a tidal slough in the swamp lands north of Suisun Bay. It is navigable at high tide to Suisun, a distance of about eleven miles.

"Deer Creek, between the house of Peter Lassen and its mouth."

"Big River, three miles from its mouth."

"Noyo River, three miles from its mouth."

"Albion River, three miles from its mouth."

The last named three rivers are small streams on the Mendocino County coast.

"San Antonio Creek, in the county of Alameda, from its mouth to the old embarcadero of San Antonio."

The mouth of this creek is a broad tidal estuary, which forms Oakland's harbor, and is being improved at Government expense.

"The Arroyo del Medo, in the county of Santa Clara, from its mouth to the upper line of the town of New Haven."

"So much of a slough as lies between Simons Canal, in the town of Alviso, and the Bay of San Francisco."

Both of the last named channels are tide-land sloughs at the southern extremity of San Francisco Bay.

"Mission Creek, in the county of San Francisco."

"Islais Creek, in the county of San Francisco, from Franconia Landing, near Bay View Turnpike, to its outlet into the Bay of San Francisco, and thence easterly along the southerly line of Tulare Street to the city waterfront on Massachusetts Street, of the width of the channel of said creek."

"That portion of Channel Street, in the city of San Francisco, and lying east of and between the easterly line of Harrison Street and the waterfront of the Bay of San Francisco, the width thereof to be sixty feet from Harrison to the northeasterly line of Seventh Street, and one hundred and forty feet from the northeasterly line of Seventh Street to the city front."

"That certain creek running through tide land survey numbered sixty-eight, and swamp and overflowed land survey numbered one hundred and forty-five, from its mouth to the head of tide water therein."

This refers to Coyote Creek, in Alameda County. A subsequent enactment provides that a certain creek in the township of Washington, Alameda County, running up to Warm Springs Landing and connecting the waters of the Bay of San Francisco with said landing, is navigable; and this enactment has reference to Mud and Coyote Creeks, the former of which is a branch of the latter.

"San Leandro Creek, from its mouth at San Francisco Bay to Andrews Landing."

"Johnsons Creek, from its mouth at San Francisco Bay to Simpsons Landing."

"San Lorenzo Creek, from its mouth at San Francisco Bay to Roberts Landing."

"Alameda Creek, from its mouth on the Bay of San Francisco to the northwesterly line of Mrs. E. T. Randall's place." (Declared navigable by an Act approved March 7, 1874.)

"The north branch of Alameda Creek, from its mouth to Eden Landing."

The navigable portions of the last four streams are within the tide land area east of San Francisco Bay.

"San Rafael and Corte Madera Creeks, from their mouths as far up as tide water flows therein."

"The Nueces Creek, from its mouth at Suisun Bay to a point one half mile above the warehouse of George P. Loucks."

"Diablo Creek, from its junction with the Nueces to a point opposite the warehouse of Frank Such, in Contra Costa County."

Nueces Creek drains the western slope of Mount Diablo. The portion declared a public way lies in the swamp-land belt south of Suisun Bay.

"So much of the stream known as the Arroyo de San Antonio, or Keyes Creek, in Marin County, as lies between its mouth in Tomales Bay and a point three hundred feet above or east of the wharf, in said stream, known as the Ocean Road Wharf." (Declared navigable by the Act approved March 24, 1874.)

"All the streams and sloughs emptying into Elk River, and all streams and sloughs south of Eureka, in Humboldt County, which are now, or at any time have been used for the purpose of floating logs of timber, and all the sloughs south of Humboldt Point, in said county, that at high water have a depth of two feet of water, and wide enough to float and admit a boat carrying five tons or more of freight."

"Novato Creek, or estuary, in Marin County, from its mouth to Sweetzers Landing."

"Salinas River and Elkhorn Slough, or Estero Viejo, in Monterey County, from its mouth as far up as tide water flows."

The streams known as First Napa Creek, Second Napa Creek, and Third Napa Creek, in the county of Sonoma, and between the Napa and Sonoma Rivers, are "declared navigable waters of the State."

"Lake Earl, in Del Norte County, and State of California, is hereby made and declared navigable." (Act of February 4, 1874.)

"Moro Cojo Slough, in the county of Monterey, from a point where said slough enters the Salinas River to tide water." (Act approved March 30, 1874, declares this stream navigable.)

"The slough or creek situated in Marin County, known as Gallinas, or Guyanas Slough or Creek, from its mouth up to the line of the Sonoma and Marin Railroad." (Declared navigable by an Act approved March 25, 1876.)

"Sonoma River, in Sonoma County, from its mouth to a point three hundred yards along the bank of the said river south of the residence of Captain John Stofen." (An Act approved February 11, 1878, restricts the river's navigability to this portion of the stream only.)

"Smith River, in Del Norte County, for a distance of four miles above its mouth."

"Clear Lake, in Lake County." (Act approved March 29, 1878.)

"Klamath River from its mouth to the town of Orleans Bar." (Declared navigable by Act approved April 23, 1880.)

For further information concerning the navigability of Klamath River, reference may be had to the report of Major W. H. Heuer to the Chief of Engineers, U. S. Army, dated November 22, 1888, in which he says:

Extending from both banks of the river at its mouth are two low, flat sand-spits, not over fifty to seventy-five yards in width, the crest of which is not more than two to three feet above high-tide level; these spits approach each other to within about sixty yards, and through this little opening the Klamath River finds its way to the ocean. Occasionally this spit is entirely across the mouth of the river, forming a bar or dam, and remains so for a day or more—until the pent up water in the rear breaks through and again opens the river. On January 2 and 3, 1888, the river was thus closed. * * *

Once inside the barrier at the mouth of the river, the anchorage is good, and has an area of a little less than one square mile; at high water a boat drawing five feet might get up the river for about two miles above its mouth, where a sand and gravel bar is found. If this bar could be crossed another pool would be found which would enable the same vessel to get, say, five miles further up the river to Turip, an Indian village. Beyond this nothing but canoes could float. * * *

In fact, from my examination of the mouth of this river, I have no hesitation in saying that its improvement is not a public necessity, and that the Klamath River, in consequence of the comparatively small benefit to be derived from the improvement, is unworthy of being improved.

If the enumeration of the streams which should be considered public ways is to be of any value, it should, at least, be complete, and the proposed head of navigation in each case should be so clearly described that there can be no question as to the exact point intended. The above list of public ways does not include the tidal sloughs in the delta of Sacramento and San Joaquin Rivers, such as the Three-Mile, Seven-

Mile, Disappointment, Whisky, and Latham Sloughs, False River, and other navigable channels. Neither does it include Middle River, Old River, Burns Cut-off, or Georgiana Slough, all of which are in whole or in part navigable. Neither is Stanislaus River nor Merced River included in the list. Lake Tahoe, Donner Lake, and Independence Lake are not enumerated, yet all of these, together with other mountain lakes, are equally as navigable as Clear and Earl Lakes.

It is not to be presumed that a simple declaration of the Legislature will make a stream navigable which is not so in fact, although by reason of such declaration, it may be possible to enforce the regulations prescribed by statute for public ways. An enactment on the part of the State restricting the navigability of any stream to a shorter portion of the same than is navigable in fact, seems to be nugatory, because, if the navigability is a fact, then statutory enactment cannot alter this fact.

The State should not authorize any work, except with the consent of the proper United States authority, that will interfere with such navigability, or that will reduce the length of the navigable portions of any waterway.

RECOMMENDATIONS.

There were no funds placed at the disposal of this Commission by the Act creating this Commission, with which to employ engineers and carry on field work, and owing to the insufficiency of the sums loaned the Commission by its individual members, it has not been possible to make "all such necessary and proper surveys, examinations, maps, designs, drawings, estimates, specifications, and exhibits as will enable Congress of the United States to clearly understand the condition of such rivers, and the cost and expense of properly rectifying and improving the same."

We have, however, prepared a general map of the Sacramento Valley showing contour lines and some of the elevations on which the contours are based, and presenting a correct alignment of Sacramento River to accompany this report. This map was compiled from the latest United States, State, and private surveys.

This report is accompanied also by a set of diagrams showing the stage of water at Sacramento City from 1849 to 1862, and from 1874 to 1890. (No records were available for the time period 1862 to 1874.) (See pages 30-31 of this report.)

We submit, also, a set of diagrams representing cross-sections of Sacramento River in front of Sacramento, with the results of soundings at various times from 1854 to 1889. (See pages 32-33 of this report.)

The investigations and examinations made by this Commission can lead to no other conclusion than that the two rivers under special consideration need a comprehensive and systematic treatment for their improvement as drainways, as well as for the improvement of their navigability.

The insufficiency of the natural waterways to carry flood volumes has been clearly shown in preceding chapters, and more waterway must be provided. Under the present system of reclamation work, lands can be protected upon one side of the river only to the injury of lands on the other side. It was intended that under the swamp land reclamation laws, only such lands as were susceptible of protection by one system

of works, and, it should be added, all lands benefited by such works, should be formed into separate reclamation districts. But the attempt to reclaim lands without proper and intelligent attention to the providing of waterway for the floods has brought about a very peculiar condition of affairs. Many reclamation districts cannot be protected from inundation by the system of works as originally planned; others are dependent upon the works in other districts, as well as upon their own, for protection; and finally, many of the reclamation districts rely for protection upon the weakness or lack of works in adjacent districts.

It is not necessary to cite many examples. Sacramento Basin could not be protected from inundation (Sacramento River being in its present condition of obstructed waterway), if the west-side levee southward from Feather River to the head of Grand Island were maintained intact at a greater elevation of its crown than the east-side levee below Sacramento.

Colusa Basin land owners cannot hope to escape annual flooding if the outflow of water across the east bank of Sacramento River, below Colusa, be completely checked, and if their east-side neighbors build better and higher levees than those on the west side of the river.

Under the present reclamation system the residents of one bank of the river are thus frequently pitted against those of the other bank. Those upon the one side try to build their levees higher and stronger than those of the other. Each land owner tries to outdo his neighbor in the strength of his defenses against overflow. "If the levee must break, let it be on some other man's land." This is the prevailing sentiment.

"Living upon the bank of the river, behind a high embankment of earth, softened by long-continued rain, with the water of the river steadily rising toward the top of this dike—after days and nights of exciting work fighting the encroaching flood—the swamp land owner sees himself in imminent peril of losing the fruits of his labor unless the river somewhere find an easement which will check its rise.

"The break in the levee may occur in front of his house, or in front of his barn; he may lose his horses and cattle in the flood; his life and the lives of his family are imperiled. Is it then to be wondered at that he prays for a break on the other side of the stream, or even on his neighbor's land? Or that he feels impelled to step forth in the darkness and cross the tumult of water to cut out a dam in some depression leading from the river on the other side, where the flooding will at least endanger no lives?"

No change in this situation need be expected until provision shall have been made for a comprehensive and adequate system of river treatment.

That this system of protecting lands against overflow by a mere building of levees on top of the natural river bank, regardless of its capacity as a waterway, is not always due to the lack of engineering advice, is evidenced by the following extract from a letter by the late General B. S. Alexander, of the Corps of the United States Army Engineers, to General H. M. Naglee, in October, 1876:

The southern end of Union Island presents very favorable features for cheap and substantial reclamation. Around this end of the island, in almost all places, as far down as Moores Landing, and even below, we find a natural bank along the margin of Old River, of a strong clayey loam, rising from one to seven feet higher than the land inside of it, even at short distances, such as fifty to one hundred yards.

It is upon this natural bank that your artificial levee should be placed, because it

would be stronger when placed upon this bank than if built inside of it, where it would have to sustain a greater pressure of water. And, again, it will be cheaper to build on this natural bank than on the lower ground inside of it.

As to the height and size of your levee—I mean the levee on the upper end of Union Island, where the material is of excellent quality—I would recommend you to follow about the following rules:

First—Ascertain all possible flood-marks of a certain flood, say that of last July, when the water was very high, then hold the top of your levee three feet above this flood.

* * * * *

The State should modify its reclamation policy. . All low lands in or adjacent to the basins along Sacramento River, together with the delta lands of this stream, should be in one drainage district, and all similarly situated lands along the San Joaquin River should be in another district. District boundaries should be defined by competent State authority—by a State Board of Public Works—and all work for the improvement of drainage should be planned by such a Board, or under its supervision, and provision should be made to have the work paid for in proportion to benefits resulting therefrom.

Had the State, before authorizing the sale of any swamp and overflowed land, made proper provision for a complete and systematic drainage of the entire region requiring improvement of its drainways, the lands, as soon as they had been made reasonably secure against inundation and injury from overflow, could have been sold at prices graded to cover the cost of the works required to protect them, and no conflict between local interests would have been engendered.

This Commission is unanimous in the opinion that, except where an entirely new channel is substituted for portions of the natural waterways, these waterways should, in the interest of navigation, as well as to secure a rapid delivery of flood waters into the bay, be so treated that they shall flow at their utmost capacity before any water is allowed to escape from them, and that no water should escape from any relief outlet, whether natural or artificial, any longer than may be required to prevent a rise of water above a danger line, which should be established from time to time by competent United States or State authority.

When a system of relief outlets is made a part of the river improvement work, then these outlets should be so located that they will not effect a sudden reduction of the river's flow such as results in the case of crevasses in the river levee. They should be located at reasonable distances apart throughout those portions of the river where a too sudden reduction of the capacity of the natural channel of the river is apparent. Such points are, in the case of the Sacramento, below the mouth of Stony Creek; and again, in the vicinity of Butte Slough; and near Paradise Cut, in the case of San Joaquin River.

In referring thus to relief outlets, the Commission does not desire to be understood to be in favor of a mere partition of the waters of Sacramento or San Joaquin Rivers for the purpose of reducing flood volumes. The idea is rather to afford the relief, which must be had somewhere, at selected points, over structures which cannot be eroded, and only at stages at which the river would break levees if such easement were not afforded.

Works of this character would be of benefit alike to navigation interests and to reclamation; and in such works, the United States, the State, and the private land owner are jointly interested.

But if there are any works to be carried out for the general improvement of the navigable portions of the rivers, then questions of financial

nature arise. If such works benefit navigation at the same time that they lessen or prevent inundation, who shall pay for them? They may be of greater importance to the navigation interests, or of greater importance as aids to drainage. No work can be carried out on the Sacramento River, below the mouth of Feather River, with a view to a removal of the silt which has there been accumulating since 1850, in the interest of navigation, that will not increase the capacity of the river and make it a better drainway.

Hoping for Government action in this direction, shall the land owner and the State, which is particularly interested in effecting a thorough reclamation of the very fertile lands now annually submerged, remain inactive, trusting to the ultimate success of the works which may be constructed on the advice of United States engineers, but which, possibly, will not be even recommended by these engineers until the evils already pointed out have greatly increased?

The time has come when the policy of river treatment should be finally decided upon. The State and the people of the State should know to what extent the works of the United States, constructed solely in the interest of navigation, may be expected to improve the drainways of our great valleys. Facility should be afforded to decide upon a correct and comprehensive system of river improvement. The general plan of works should be agreed upon, and an apportionment of expense incurred in their construction should be made.

Congress, through its proper officers, should be fully informed of all relief or improvement schemes that are to be carried out, because these works all have some bearing upon the navigability of the rivers at their low stages. It does not, therefore, seem possible to secure a correct plan, or general system of river treatment except through a Board of Engineers, composed in part of United States Army engineers and in part of civil engineers representing the State of California.

All expenditures for the improvement of California's great rivers, that have been authorized by Congress, have been made solely in the interest of navigation. They have, in most cases, been based upon specific recommendations of the United States Army engineers in charge of the rivers. Navigability being assured at the high stages of the several rivers, the engineers have, with few exceptions, directed their entire attention to the low-water condition of the navigable streams.

The works recommended at various times in the past for Sacramento River have never been such as could be classed among permanent improvements. All have been intended to effect merely a temporary betterment of the low-water channel of the river. The work done has been mainly the removal of snags in the upper river, the construction here and there of low temporary wingdams to cause the cutting of a channel through some local sand or gravel bar, and other work of a kindred nature. Little attention has been paid to the high-water flow of the river, and no attempt to control it, for the improvement of the low-water condition of the river, seems to have been made, until the work of closing the Paine crevasse was undertaken by the United States engineer in charge of the Sacramento River, Major W. H. Heuer, early in the spring of this year. This work, which is intended to preserve the integrity of the river, does, at the same time, by maintaining the scouring force of the river at points below the crevasse, aid in deepening and maintaining all that part of the river from the crevasse to the foot

of Grand Island, where the water escaping from the crevasse effected a reëntry into the river.

On San Joaquin River there are several instances where works, recommended by the United States engineers and constructed at the expense of the general Government, have been permanent improvements. Such are the cuts near the lower end of Rough and Ready Island, which greatly improve the river's alignment, and the construction of the overfall weir in Paradise Cut.

In the report of Major W. H. Heuer, Corps of Engineers, to the Chief of Engineers, U. S. Army, for the year ending June 30, 1879, he says, in reference to the improvements on Sacramento River:

The approved project had for its object the temporary improvement of the low-water channel by snagging, wingdamming, and bar-scraping. All the work in the past year was done by the United States snagboat "Seizer," and hired labor. * * *

Up to the present time Congress has appropriated for Sacramento and Feather Rivers \$465,000, of which \$342,632 01 has been spent, including the cost of constructing a dredge, snagboat, and two barges, for use in these rivers. There is yet unexpended the sum of \$122,367 99, of which \$100,000 cannot be used, as Congress, by Act of July, 1884, prohibited the expenditure of these funds until the Secretary of War should be satisfied that hydraulic mining had ceased. Hydraulic mining has not ceased, hence these funds are not available. The further sum of \$13,890 13 has been set apart for legal expenses in connection with the suppression of hydraulic mining.

Below Marysville both the Sacramento and Feather Rivers continue to deteriorate. * * With the moneys appropriated in the future, unless otherwise directed by Congress, it is proposed to continue work with the snagboat, after she is repaired, and to wingdam as may be required.

Referring to the navigable waters of the San Joaquin River in the same report, Major Heuer says:

The approved project as adopted in 1877, and slightly modified in 1881, has for its object the securing and maintenance, by dredging, of a channel nine feet deep, at low water, and one hundred feet wide, through the tidal parts of the river and Stockton Slough below Stockton, a channel four feet deep and eighty feet wide to Miller's warehouse in Mormon Slough, and temporary improvement of the low-water channel of the upper San Joaquin River to Hills Ferry.

The total amount expended on the river and sloughs to June 30, 1888, has been \$157,954 36, and during the past fiscal year an additional amount of \$15,079 76 has been spent, making a total to date of \$173,034 12.

According to the reports of the U. S. Army engineers in charge of river work, the project adopted in 1884 for the improvement of the navigability of Mokelumne River, has for its object the removal of snags and overhanging trees in that part of the river within tidal influence, where there is sufficient depth of water for navigation. "This extends through North Fork a short distance above Bensons Ferry."

In the case of some of the rivers of this commonwealth, appropriations made by Congress for special works, or for general river improvement, aid, incidently at least, in preventing inundation. About fifty years ago Congress commenced making appropriations to be expended in devising a system of preventing the inundation of the Mississippi River delta, and of improving the outlet channels of that river.

In May of this year, in his testimony before the Commerce Committee of the United States Senate, General Cyrus B. Comstock, President of the Mississippi River Commission, says, when asked whether, when an appropriation of two or three million dollars for the improvement of the Mississippi River is made, it would be best to direct the expenditure of money at particular points, that "if the money is to be expended in protecting towns and cities and villages along the river, that object will be attained by that process, but probably there will be very little left for the improvement of the river generally."

In reply to the question: "Has not the Commission, so far as navigation and its interests are concerned, been very much crippled by the action of Congress in thus disposing of its appropriations?" he says: "I think so in some degree, because I think Congress would have given us probably a larger amount for the general improvement of the river if they had not made specific appropriations. For instance, in the last bill there was an appropriation of fifty or sixty thousand dollars for Columbus, some for Greenville, and so on down. Those were all places where money would come out of what we would otherwise have had to use for the general improvement of the river."

Besides urging sympathy for the many residents of the Mississippi Valley who annually suffer from the widespread inundations caused by the waters of that river, it may be urged that a systematic treatment of that river, involving a control of its flood flow, could not be had by a mere coöperation of States, in each of which policies, in the matter of river treatment, might change from time to time; and that in this case it was necessary for Congress to take cognizance of the peculiar conditions there prevailing, and to point out, through a properly constituted River Commission, what river improvements should be made. Congress has done this, and it has done more. It has paid for river improvements, which, incidentally at least, serve also as protection works, and the expenditure of money for such improvements still goes on.

General Comstock, already above quoted, says, in reply to the question, how two and one half to three millions of dollars, appropriated for the improvement of the lower Mississippi, without restrictions, would be expended by the Mississippi River Commission, that he does not think it would be an unjust distribution to make the distribution made heretofore, two thirds for the improvement of the river and one third for the levees.

Lieutenant-Colonel Charles R. Suter, U. S. A., also a member of the Mississippi River Commission, in giving testimony before the Commerce Committee of the United States Senate (May, 1890), says:

The second feature of the proposed plan was the revetment of banks where exposed to erosion, the idea, of course, being to make the current act on the bottom instead of the banks, in order to deepen the channel.

These two constitute the main elements of channel improvement in the bed of the river; that is, permeable dikes to induce deposits and revetments to hold the banks and keep the river in place. The maintenance of levees on the top of the banks was thought by the Commission to subserve two purposes. In some places there is very little question that the navigation of the river has been seriously deteriorated by the existence of breaks in the levees. That, of course, is especially manifest in those portions of the river that have been leveed for a long time; that is, where the system of levees has been kept up for a great many years.

It has been found by measurement, that below extensive gaps in the levees there is a decided deterioration in the channel, and the Commission were of the opinion that this deterioration is due to the existence of these gaps; hence, their inference was, that if those gaps in the levees were closed, the deposits formed under the influence of the crevasses would be swept away, and the channel of the river correspondingly improved and deepened. Furthermore, levees were deemed essential, both for the safety of the works in the bed of the river, and to maintain the regimen at those places where it was already good. The only way to obtain uniformity of regimen, or to keep it when obtained, is to control the entire discharge of the river, which, of course, means the control of floods as well as low stages.

From this point of view the function of the levee system may be considered as conservative; its other function confers a direct benefit. The plan of the Commission contemplated both of these functions and these three factors; that is, the channel contraction works; the revetment of the banks, and the levees on top of the banks, constitute the plan on which the Commission has worked from that day (time of organization in 1879) to this.

The Sacramento and San Joaquin Rivers, which, with their tributaries, present a navigable waterway about six hundred miles in length, are not interstate rivers, but this is no reason why they should not receive the same attention which is accorded to other rivers of the commonwealth, and to which they would unquestionably be entitled if they were interstate rivers; that is, if California were cut up into three or four small States of the size of those bordering on the lower Mississippi.

If, now, these rivers are entitled to a system of treatment involving as one of its features the maintenance of levees on the river banks, it is high time that this should be known to this State, in order that the State may make proper provision for the improvement of the drainways of the valley in harmony with the Government works intended to better its navigability.

The Mississippi River Commission was created by Act of Congress, approved June 28, 1879. It is composed of seven members, appointed by the President. Three of these are from the Engineer Corps of the United States Army; one is from the Coast and Geodetic Survey, and three are from civil life, two of whom must be civil engineers.

In order to obtain a clear understanding of what a Board of Engineers, placed in charge of the general improvement of the Sacramento and San Joaquin Rivers, may be expected to accomplish, recourse must be had to the work of this Mississippi River Commission. The following extract is made from the report of the Commission in 1885:

The Mississippi River Commission, constituted under an Act of Congress, approved June 28, 1879, was required, in addition to completing the surveys then in progress, and making such additional ones on the Mississippi River and tributaries as might be deemed necessary, to mature such plan or plans as will correct, permanently locate, and deepen the channel and protect the banks of the Mississippi River, improve and give safety and ease to the navigation thereof, prevent destructive floods, and promote and facilitate commerce and the postal service, and with such plans to prepare and submit estimates of the cost of executing the work.

It was also required under the law to report specifically upon the practicability, feasibility, and probable cost of the plans known as the jetty system, the levee system, and the outlet system; also, to submit plans and estimates of cost of such immediate works as, in the judgment of the Commission, may constitute a part of the general system of works contemplated.

The first report of the Commission, dated February 17, 1880, discussed the jetty system, the levee system, and the outlet system, and recommended a plan of improvement which contemplates the concentration of the waters of the river as the principal agent in securing the needed improvement, and, briefly stated, the general and well known principles on which the opinions of the Commission were based.

The outlet system, by which a portion of the flood waters of the rivers would be drawn off and conveyed through shorter routes to the Gulf, being one of diffusion and waste, and having very little in the way of either theory, experience, or observation to recommend it, was unanimously rejected by the Commission for reasons set forth in the report.

The levee system, and the degree to which levees might be prudently relied on as auxiliaries to a plan of improvement based on the concentration of river waters, was carefully considered. It was the opinion of the majority of the Commission that in time of bank overflow "levees exert a direct action in deepening the channel and enlarging the bed of the river;" that "they are regarded as a desirable, though not a necessary adjunct in the general system of improvement submitted;" that "they are, upon a large portion of the river, essential to prevent destruction of life and property by overflow;" that "they give safety and ease to navigation, and promote and facilitate commerce and trade by establishing banks or landing places above the reach of floods, upon which produce can be placed while awaiting shipment, and where steamboats and other craft can land in times of high water;" that "the closure of crevasses will accomplish the removal of shoals caused by them;" and that "it is believed that the repair and maintenance of the extensive lines already existing will hasten the work of channel improvement through the increased scour and depth of the river bed which they would produce during the high river stages." * * *

The plan of improvement recommended was discussed at some length in general terms, beginning with the statement that "the bad navigation of the river is produced by the caving and erosion of its banks, and the excessive widths and the bars and shoals resulting directly therefrom."

Further on the report said: "It would seem, therefore, that the plan of improvement

must comprise as its essential features the contraction of the waterway of the river to a comparatively uniform width, and the protection of caving banks;" and again, "wherever necessary, the new bank must be protected by a mattress revetment, or some equivalent device;" and again, "as a general rule, the channel should be fixed and maintained in its present location." * * *

The plan, therefore, contemplates the closing of outlets, both low-river outlets and crevasses; the contraction of the waterway of the river where the widths are excessive and the navigation bad, and the maintenance of banks. In the execution of the plan thus briefly outlined, and in strict accordance with its original intent, and for no other object or purpose, the money appropriated by Congress has been expended.

The total cost of works of bank revetment and channel contraction actually executed by the Commission between Cairo and Vicksburg from the time it assumed charge to June 30, 1885, has been as follows:

Works for protecting the bank.....	\$2,240,000
Works for contracting the channel.....	2,500,000

* * * * *

A very considerable portion of the sum expended for bank revetment was designed to give protection to certain cities and harbors—Memphis, Vicksburg, and others. These harbors were given in charge of the Commission at a later period, and some of them required special and prompt treatment. If Delta Point had not been held by revetting its banks with mattresses at considerable cost, the city of Vicksburg would long before now have been practically an inland town, entirely cut off from the river. At Memphis great values were also put in jeopardy by a rapidly caving bank, which threatened to carry off a portion of the city. Bank revetment, as offering the only possible means of arresting the danger, was successfully applied in this case. * * *

It may be stated that it is not the intention, nor has it been the practice, of the Commission to protect a bank by revetment merely because it is caving. Other considerations must govern this question. But where an imminent danger threatens the immediate destruction of interests of great value—as, for example, where a caving bend is about to take in, flank, and carry away costly works of improvement or produce a disastrous cut-off, or where a city's river front is to be maintained, as at Vicksburg, or a portion of the city itself is to be protected, as at Memphis—then it is believed to be imperative that the local remedy of holding the banks intact by a mattress revetment or other equivalent device should be adopted.

This report was signed by Q. A. Gillmore, Colonel of Engineers, Bvt. Maj.-Gen., U. S. A., President Mississippi River Commission; Chas. R. Suter, Major of Engineers, U. S. A.; Henry Mitchell, Coast and Geodetic Survey; B. M. Harrod, R. S. Taylor, S. W. Ferguson.

In enlarging upon this report, General Gillmore further says:

As there are no portions of the river where levees sustain relations to the general plan of improvement more important than those which obtain in these lower reaches, so there are none where their importance is more likely to be underestimated, or even entirely overlooked, for the reason that the low-river channel, being at all times sufficiently deep for purposes of navigation, levees do not suggest themselves at all as means of improvement below Red River. The essence of the whole matter is apt to be lost sight of, that they are required below for the benefit of the river above, and that they are valuable in proportion as they help to enlarge the river bed, facilitate the discharge of floods, lower the flood heights, lessen the difference between high and low river, and thereby ameliorate and simplify all the difficulties of improvement.

In making appropriations for the improvement of the Mississippi River, under the direction of the River Commission, Congress has expressly provided, in each of the several Acts, that the Commission is authorized to repair and build levees, if in their judgment it should be done as a part of their plan to afford ease and safety to the navigation and commerce of the river, and to deepen the channel. But this provision is coupled with another, that no portion of the appropriation made shall be expended to repair or build levees for the purpose of reclaiming land, or preventing injury to lands by overflow.

The Mississippi River Commission, in carrying out a system of river improvement in line with the policy as expressed in the reports of the Commission, has expended (see reports of Commission for 1888 and 1889):

Below Cairo, from March 3, 1881, to June 30, 1888:

For river works	\$7,597,729 01
For levees	2,443,124 17
Above Cairo, in the aggregate, about	1,500,000 00
Above and below Cairo, in the aggregate, from July 1, 1888, to May 31, 1889 ..	1,405,982 00
Below Cairo, for work in specified localities, about	1,600,000 00

The Commission, in its report dated June 20, 1889, says:

Finally, the Commission wish to state that nothing has occurred to change the views heretofore expressed, that the improvement of the Mississippi according to the principles, and on the general lines set forth in previous reports, is entirely feasible.

In the report of Alex. D. Anderson, on the Mississippi and its forty-four navigable tributaries, we read: "The total sum expended by the general Government from March 4, 1789, to June 30, 1886 (a period of ninety-seven years), in the improvement of the Mississippi and its forty-four navigable tributaries, was in round numbers about \$51,000,000."

Whether a scheme of river improvement shall have been devised and approved by a Board of Engineers, as above suggested, or in any other way, or not at all, there are many local improvements that should be made at once, which would be of unquestioned advantage to the preservation and improvement of the river's navigability, and would also improve them as drainage outlets for the valleys. Of these we enumerate a few:

From the foot of Grand Island to its mouth Sacramento River should be made a channel of uniform width, by a reduction of width just above Rio Vista, on the Newtown Shoal, and near the lower end of Sherman Island, and at several intermediate points, and by a change in the alignment of banks at and opposite Horseshoe Point, just above Emmaton. This work should extend over a number of years, and \$25,000 per annum should be expended upon it. It will deepen the channel on the shoals, and will increase its capacity.

Steamboat Slough should be made the principal channel of Sacramento River. This is to be accomplished by correcting the head of the slough by means of a cut about one thousand feet in length, and by widening the slough for a distance of four and a half miles from its head to the lower end of Sutter Island to a width of five hundred feet. This work involves the moving of about five million cubic yards of earth, most of which could be removed by the erosive force of the water. It also involves the acquisition of a strip of land adjacent to the slough and now in the hands of private owners. The correction in the upper portion of the slough will in all probability result in the complete cutting out of Hog's Back Shoals. Some dredging will there be required if this result is not realized. The effect of this channel correction would be to increase the capacity of Sacramento River, at all points below Feather River, about 25 per cent. It would cause at least three feet of the silt now in this part of Sacramento River to be swept out. It would, therefore, by adding to the capacity of the river, cause less water to pass down the Yolo Basin, consequently there would be less massing of water at the lower end of Grand Island, and there, too, flood heights would be reduced. It would improve the outfall of Feather River by lowering the water in Sacramento River at that point, and would thus be a benefit to the navigability of that river, and of great benefit to it as a drainway. This work ought to be undertaken at once, and \$200,000 should be expended upon it annually until it is completed.

It is needless to discuss the plans for this work in detail, because these should be based on special surveys, which, as already explained, could not be made by this Commission.

The present channel of Sacramento River, from Portuguese Bend to the mouth of Feather River, should be condemned, and a new channel leading directly from Portuguese Bend to the confluence of the two rivers should be substituted therefor. The river itself will cut this channel if properly aided. It will be necessary to dredge two channels about five hundred feet apart, and build levees with the material thus excavated, between which water can flow until a sufficient waterway is secured. The cost of this work will be about \$200,000, of which from \$50,000 to \$100,000 could be expended to advantage each year. This cut-off will shorten the river channel nine and one half miles. It will have a length of about three and one half miles.

"From the mouth of Sycamore Slough, at Knights Landing, to the mouth of Feather River, 14.8 miles in distance by the river, but only 5.5 miles in a straight line, there are no tributaries, and low land basins flank the river on either side—the lower end of Sutter Basin being on the left and north, and the upper end of the Yolo Basin on the right and south.

"The channel here presents an aggravated case of the disease with which it is afflicted in the preceding division—an extreme contraction and contortion of its waterway. The cross-sectional form is good and nearly uniform, there being but one shoal, which is at Knights Landing, immediately at the head of the division. The banks are firm, and generally densely overgrown with trees and shrubbery, which prevents erosion and the formation of cut-offs, for the opportunities are so favorable for these that doubtless they would occur but for this protection to the narrow isthmuses which separate succeeding reaches of the channel. The slope in this division is reduced considerably by the filling that has taken place at the mouth of the Feather." (See Report of State Engineer, 1880.)

From Colusa to Grafton, at eleven different places where the river now has a tortuous course, the channel alignment could be improved by the substitution of new channel for the present waterway. It is not our intention to discuss these several corrections in detail. They involve the making of twenty separate cut-offs having an aggregate length of seventy-five thousand feet, or about fourteen miles, and would effect a reduction in the length of the river of seventy-eight thousand feet, or nearly fifteen miles. The aggregate cost of making these cuts (which would involve a considerable outlay for the acquisition of rights of way) would exceed \$1,000,000.

The correction at the mouth of American River cannot be planned until special surveys and relative estimates of cost for the different projects that may be found feasible have been made.

The Yuba River should be turned through a new cut just below the D-Street Bridge in Marysville to a better junction with Feather River. To accomplish this a cut through a point of land densely covered with cottonwood and willow, about two thousand feet long, would be required. About \$50,000 would cover the cost of this improvement.

On San Joaquin River, even in advance of the adoption of any general policy of river treatment, the work of correcting the channel alignment of the main stream should be steadily continued, and no time should be

lost in officially establishing that alignment to which the river is to be ultimately held. Below Stockton cut-offs aggregating about two miles in length, one of which will eliminate the well known Head reach from the river, would be of great aid to the river as a commercial highway. Cuts in this part of the river must be made with excavators, because the peaty formation of the land interferes with erosion by the river water. About \$350,000 should be expended in making these cuts below Stockton.

Above Stockton the correct river alignment should be secured by the construction of works intended to cause the river to erode a new channel wherever the same is required as a correction of alignment. This work should be carried on systematically, and must extend over a period of years. It would be useless to endeavor to enumerate the many localities where these improvements should be undertaken, because the first step in the direction of the improvement of the upper San Joaquin River must be the adoption by the proper authority of a comprehensive plan of works. Until this plan is adopted the conservation of the present main channel of the river is essential. Consequently, the tendency of the river to cut a new channel toward the west from Paradise Cut across country to Old River should be checked. Paradise Cut should be closed to, or nearly to, natural bank heights, and money should be available to protect banks at other points. This work would involve an immediate outlay of about \$20,000, and an equal amount should be held available for annual use if required.

As soon as the necessary steps have been taken to fix the ultimate alignment of the river, then from \$50,000 to \$250,000 should be expended annually upon works designed to effect the proposed alignment changes.

These works of channel rectification and improvement would be of undoubted utility to the navigability of the rivers, and it is for this reason that special mention of them has here been made. It is also a fact that some of them would improve the rivers as main valley drains. But it must be evident to all who have followed us to this part of our report, and to all who are personally familiar with the situation, that there is also another class of works required in connection with the matter of river improvement now under consideration.

The drainage of the valley must be improved. The inundation of lands by water from the rivers, or by an accumulation of surface drainage in depressions, should be prevented, and works are required which, though they form part of the river improvement, may have no direct bearing upon its navigability. To such works the State and the land owners should not expect the United States authorities to devote any attention, except in so far as works in the aid of drainage, or to prevent inundation, might, if not properly planned, injure or interfere with the navigability of the rivers.

Paine crevasse, below Sacramento, in December, 1889, established the fact that occasionally some effort will have to be put forth to preserve the integrity of Sacramento River, and it may be that more attention will hereafter be paid to a conservation and protection of the river banks than has been done heretofore. The recent experience may even lead to the construction of artificial high banks, or levees, for the purpose of increasing the sediment-transporting power of the river, and causing an erosion throughout all that part of the stream that has for

many years been so greatly obstructed by the accumulation of silt, due to the mining operations of the last forty years.

If such high banks, or levees, be recognized as necessary for this purpose by the United States engineers in charge of the rivers, then these works can at once become a part of the system of works required to protect lands from inundation.

With a knowledge of the amount of fill in the Sacramento River below Feather River, and the firm conviction that, by a systematic treatment of the lower river, including the Steamboat Slough enlargement, the river can be forced to scour out its bed to its original depth, or to nearly twice its present capacity at ordinary flood stage, this Commission believes that ultimately this part of the river can be made to carry the full flood flow of the Sacramento Valley streams, and that all relief through high-water outlets—intended to reduce flood flow—below the mouth of Feather River should be temporary. It is to be hoped that this result will be had from works authorized by Congress; but the State and the land owners are so deeply interested that the general plan of works should be agreed upon by a Board of Engineers, representing all interests, at the earliest possible moment. Relief outlets, even though in most cases intended to be only temporary features of the river improvement works, by discharging water across river banks at the height of floods, would cause inundation of submersible lands, unless provision is made, in each case, for a proper quick delivery of such out-flowing water to the bay. The control of this water is of particular interest to the owners of the land which it would submerge if it flowed into the flood basins unrestrained, and works for its delivery to the bay should be planned by State authority, and should be paid for by the districts in proportion to benefits derived.

Each of the several flood basins, through or around which all water discharged by high water escapes, or relief outlets from the river must flow, are the recipients also of more or less drainage water from adjacent high plain lands, foothill, and even mountain regions. Colusa Basin receives the water from nearly eight hundred square miles of the eastern slope of the Coast Range, and Yolo Basin from one thousand eight hundred and seventy square miles, besides the drainage from the adjacent valley plain. To prevent an accumulation of this water in the several basins, some provision should be made to intercept it and to deliver it at some point of outfall. It can be pumped from the basins only when its quantity is small, in years of light rainfall, or where, as in the case of Sacramento Basin, the whole drainage basin is of small extent.

The Coast Range drainage, entering both Colusa and Yolo Basins, can be intercepted by properly located canals, and in each case two methods of delivery are possible. The water flowing toward Colusa Basin can be delivered by gravity flow through a deep cut in Knights Landing ridge to the head of Yolo Basin, and thence through the latter's intercepting works to the bay, or it can be held sufficiently high to be delivered into Sacramento River just above Knights Landing. The former method has the advantage of effecting the drainage at a lower level. Both plans are feasible, and the delivery into Sacramento River would not be objectionable if the cut, as above recommended, to Feather River were made. The water of Cache Creek, and of Putah Creek, which represents the principal inflow into Yolo Basin, aside from the overflow of Sacramento

River, can also be intercepted, and its delivery to the bay is possible, either in a canal with high levees, reëntering the river at Cache Slough, or by way of a deep cut through Montezuma Hills. The latter method of delivery enables a drainage to a lower level, but the advantage gained thereby is slight. The river already affords an equally direct line of delivery to the bay, and, in view of the great cost of constructing a deep cut through the hills, the discharge into the river should be preferred, as it can be so planned that it will in no way interfere with subsequent delivery through a Montezuma Hill canal.

We have drawn attention to some of the works which are required to rectify and improve the two most important rivers of this State, in order that there may be no doubt that these streams need immediate, thorough, and systematic treatment.

All physical obstacles in the way of such treatment can be overcome by engineering skill. It is feasible, from an engineering standpoint, to improve the rivers as navigable channels, and to control the flood flow of waters to the bay, with reasonable security against inundation of low lands.

But the work authorized by the State should harmonize with what may be authorized by Congress.

Respectfully submitted.

C. F. REED,
C. E. GRUNSKY,
J. J. CRAWFORD,
Commissioners.

APPENDIX.

STATISTICS OF THE COMMERCE OF THE SACRAMENTO AND SAN JOAQUIN RIVERS.

TAKEN FROM THE REPORTS OF THE CHIEF OF ENGINEERS, UNITED
STATES ARMY, TO THE SECRETARY OF WAR.

REPORT OF 1880.

SACRAMENTO RIVER. (Page 2,235.)

COMMERCE OF THE RIVER.

On the upper river there are three companies engaged in transportation. The transportation is mainly carried on barges, which are made to carry six hundred tons on a draft of three and one half feet of water. The tendency is to larger barges. The down stream is for the most part wheat, and the active season begins with harvest in July, and ends when the wheat is exhausted. The quantity of freight depends upon the quality of the crop, in which there is a good deal of variation. Last year the quantity of wheat which found exit by the river was about one hundred and twenty-five thousand tons. The crop is larger this year, and perhaps the amount may be exceeded. The improvement of the river is the only means by which any competition in freight can be maintained. There is a railroad on each side of the river, a few miles distant, both of which are owned by the same company. These roads adjust their freights in some degree in reference to the river competition. This competition is nearly impossible unless the United States keeps the river in navigable order.

It has not been possible to get accurate statistics of the river business. Last year statements showed a business of about two hundred and one thousand tons. The area within reach of the river devoted to wheat increases each year, and, therefore, it is reasonable to expect a yearly increase of business.

* * * * *

1. The Central Pacific Railroad steamers carried during the year 1879, one hundred and forty-one thousand three hundred and sixty-nine tons.

2. The Sacramento Wood Company received in freights during the year ending June 30, 1880, the sum of \$228,000. The number of tons carried is unknown.

3. No statistics can be obtained from the San Francisco Transportation Company. The amount carried by this company is supposed to be less than that carried by either of the other companies.

San Joaquin River (page 2,248): No statistics.

REPORT OF 1881.

SACRAMENTO RIVER. (Page 2,472.)

* * * There are three transportation companies on the river, the statistics of which, as given below, for 1880, are furnished by those companies. In addition, there is a large trade in fruits and vegetables from the lower river, carried by other boats, of which it is impossible to obtain any record. The trade that comes from the Feather River is mostly omitted from this statement:

	Tons.
1. Central Pacific R. R. steamers.....	115,089
2. Sacramento Wood Company.....	125,342
3. San Francisco Steamboat and Transportation Company.....	39,228
	279,659

SAN JOAQUIN RIVER. (Page 2,476.)

* * * The following statistics, although incomplete, are the fullest that it has been practicable to obtain:

SHIPMENTS FROM STOCKTON, IN SAN JOAQUIN RIVER, FROM JANUARY 1, 1880, TO DECEMBER 15, 1880.

Grain, by nine shippers, reported.....	104,677 tons.
Flour, by two shippers, reported.....	12,652 tons.
Wool, not including amount shipped by growers.....	1,516 tons.
Leather, glue stock, tallow, etc., by shippers, reported.....	397 tons.
Paper, by one shipper, estimated.....	2,000 tons.

RECEIPTS BY RIVER FROM JANUARY 1, 1880, TO DECEMBER 15, 1880.

Lumber, by three shippers, reported.....	38,834,550 feet.
Coal, estimated by a dealer.....	32,448 tons.
Tan bark, by one shipper, 1,968 cords, estimated.....	2,952 tons.
Hides, by one shipper, reported.....	407 tons.
Farmers' stock, by one shipper, reported.....	107 tons.
Paper stock, etc., by one shipper, estimated.....	1,500 tons.
Wheat in store, exclusive of small lots, reported.....	88,184 tons.

ARRIVALS AT THE PORT OF STOCKTON FROM JANUARY 1, 1880, TO DECEMBER 1, 1880.

Sailing vessels, 446; registered tonnage.....	20,011 tons.
Steamers and barges, 910; registered tonnage.....	203,299 tons.
Total registered tonnage of 1,356 vessels.....	223,310 tons.

REPORT OF 1882.

SACRAMENTO RIVER. (Page 2,534.)

It has not been found practicable to obtain full statistics of the business of the river. The following returns are supposed to be considerably under the truth:

Freight carried on lower river.....	70,000 tons.
Freight (grain) brought from upper river.....	63,000 tons.
Miscellaneous freight from upper river.....	9,000 tons.
Lumber.....	2,500,000 feet.
Wood.....	5,500 cords.

SAN JOAQUIN RIVER. (Page 2,538.)

COMMERCIAL STATISTICS.

It has not been practicable to obtain full commercial statistics for the present year. The statistics of the last annual report are here reproduced. The following statistics, although incomplete, are the fullest that it has been practicable to obtain.

(See statement of previous year.)

REPORT OF 1883.

FEATHER RIVER. (Page 1,970.)

Statement of freight carried on the Feather River by steamers "Knight" and "Small," during the year 1882. Furnished by W. T. Ellis, agent.

Up freight, tons.....	8,900
Down freight, tons.....	14,158
Lumber, feet.....	500,000
Posts, feet.....	16,000
Hop poles, feet.....	150,000

These steamers form the regular line from San Francisco to Marysville. Other boats carry wheat from Marysville, of which we have no account.

SACRAMENTO RIVER. (Page 1,970.)

Between August 1, 1882, and July 1, 1883, there was carried on the Sacramento River, in wheat, 107,554 tons.

COMMERCIAL STATISTICS.

SACRAMENTO, August 1, 1883.

DEAR SIR: The following table will show the amount of freight moved by the Central Pacific Railroad Company's steamers for the year 1882. Will say, however, that this only shows the work of the Central Pacific Railroad Company's up-river steamers from January to June, inclusive—the business after June went into the hands of the Sacramento Transportation Company.

That portion noted as "transferred" is not included elsewhere, so that the total figures are correct.

Lower river, north.....	94,881,448 pounds.
Lower river, south.....	49,917,351 pounds.
Upper river, north.....	2,086,258 pounds.
Upper river, south.....	4,879,289 pounds.
Transferred, north.....	1,751,782 pounds.
Transferred, south.....	17,028,368 pounds.

Respectfully submitted.

ALBERT FOSTER,
Asst. Supt. C. P. R. R. Co.'s Steamers.

SAN JOAQUIN RIVER. (Page 1,981.)

Estimates of exports and imports of the city of Stockton, via lower San Joaquin River, for the year ending June 30, 1883. Furnished by N. M. Orr, Secretary of Board of Trade, Stockton:

EXPORTS.

	Tons.
Wheat and barley	91,000
Flour	47,500
Ground feed and mill stuff	11,750
Vegetables, potatoes, onions, etc.	10,250
Fruit, grapes, etc.	2,100
Carriages, furniture, etc.	550
Paper	1,600
Leather	1,100
Hides, pelts, glue stock, and tallow ..	1,050
Wines	150
Miscellaneous freights	3,300
Total exports	170,350

IMPORTS.

	Tons.
Agricultural implements, hardwood, and machinery	30,250
General merchandise	35,500
Paper	12,250
Hardwood lumber, 225,000 feet	1,125
Building and fence lumber, 45,000,000 feet	135,000
Coal	41,500
Lime and cement	1,025
Tan bark, 3,000 cords	4,500
Hides, oils, and tanners' stock	750
Total imports	261,900
Total river freights	432,250

REPORT OF 1884.

SACRAMENTO RIVER. (Page 2,192.)

COMMERCIAL STATISTICS.

The following is the estimated amount of traffic on the Sacramento River (not including the trade of the Feather) for the period July 1, 1883, to June 30, 1884.

In addition there is considerable trade in fruit and vegetables on the lower river, and in general merchandise on the upper river, for which it is impossible to obtain any record:

	Tons.
1. Sacramento Transportation Company	164,029
2. Central Pacific steamers	63,870
3. San Francisco Steamboat and Transportation Company	12,586
Total	240,485

Of this amount, 70,876 tons were wheat and barley shipped from points above Sacramento City. Amount of wheat and barley moved during the period August 1, 1882, to August 1, 1883, 109,229 tons.

Estimated crop of 1884 to be moved by steamers, 135,901 tons.

SAN JOAQUIN RIVER. (Page 2,197.)

Estimate of exports and imports of the city of Stockton, for the year ending June 30, 1884:

EXPORTS.

	Tons.
Wheat, barley, and cereals	85,000
Flour	48,500
Ground feed and mill stuff	12,500
Vegetables, potatoes, onions, etc.	21,500
Fruits, grapes, etc.	5,250
Carriages, furniture, etc.	650
Paper	1,100
Leather	1,000
Hides, pelts, and glue stock, etc.	600
Wines and brandy	500
Miscellaneous freight	9,000
Total	185,600

IMPORTS.

	Tons.
Agricultural implements	6,500
Machinery, iron, and hardware	27,250
Paper stock, chemicals, etc.	1,100
Hardwood lumber	1,500
Building and fence lumber	142,000
Coal	30,000
Lime and cement	1,250
Tan bark	4,500
Hides, oils, and tanners' stock	750
General merchandise	42,500
Total	257,350

REPORT OF 1885.

SACRAMENTO RIVER. (Page 2,364.)

COMMERCIAL STATISTICS.

The following statistics of trade for the Sacramento are furnished by Messrs. Thomas Dwyer and Albert Foster, of Sacramento:

SHIPMENTS DURING THE YEAR ENDING JULY 1, 1885.

	Tons.
San Francisco to Sacramento (merchandise)	12,500
San Francisco (lumber, 12,000,000 feet)	24,000
San Francisco (coal)	3,000
Sacramento to San Francisco (merchandise)	4,500
Sacramento to San Francisco (bricks)	54,000
San Francisco to upper Sacramento River (merchandise)	12,000
San Francisco to upper Sacramento River (lumber)	8,000
Sacramento to upper Sacramento River (merchandise)	4,000
From upper Sacramento (wheat, barley, and flour)	121,634
From upper Sacramento (wool, broom-corn, and hay)	2,450
From upper Sacramento (wood, 12,000 cords)	24,000
Total transported	270,084

Besides the above there is a considerable trade in fruit and vegetables on the lower river, of which no statistics can be obtained. Mr. Foster, Assistant Superintendent of the Central Pacific Company's boats, estimates the shipments of wheat and barley alone, for the coming twelve months, as follows:

	Tons.
In store, crop of 1884	11,732
Estimated crop of 1885	123,504
Total	135,236

The following statistics of trade for year ending July 1, 1885, on the Feather, are furnished by Mr. W. T. Ellis, of Marysville:

	Tons.
From Marysville and way landings to Sacramento, Vallejo, Port Costa, and San Francisco (wheat, woolen goods, hides, tallow, and general merchandise).....	15,600
From San Francisco and other points to Marysville and way landings (coal, salt, lumber, and general merchandise).....	7,800
Total.....	23,400

SAN JOAQUIN RIVER. (Page 2,355.)

Estimate of exports and imports of the city of Stockton for the year ending June 30, 1885:

EXPORTS.

	Tons.
Wheat, barley, and cereals.....	95,000
Flour and mill stuff.....	66,800
Vegetables, potatoes, onions, etc.....	25,000
Fruit, grapes, etc.....	7,500
Carriages, furniture, agricultural machinery, etc.....	750
Paper.....	1,200
Leather.....	1,000
Wine and brandy.....	750
Hides, pelts, and glue stock.....	500
Miscellaneous freight.....	15,000
Total.....	213,500

IMPORTS.

	Tons.
Agricultural implements.....	5,000
Machinery, iron, and hardware.....	30,000
Paper stock, chemicals, etc.....	1,100
Hardwood lumber.....	2,000
Building and fencing lumber.....	150,000
Coal.....	40,000
Lime and cement.....	1,500
Tan bark.....	4,000
Miscellaneous freight.....	50,000
Total.....	283,600

Estimate of trade by steamers and barges upon the upper San Joaquin for the year ending June 30, 1885:

DOWN FREIGHT.

	Tons.
Wheat to San Francisco.....	85,000
Wheat to Stockton.....	15,000
Hay, vegetables, etc.....	500
Wood to Stockton.....	750
Wool to Stockton.....	10
Wool to San Francisco.....	10
Total.....	101,270

UP FREIGHT.

	Tons.
Lumber from San Francisco.....	30,000
Lumber from Stockton.....	6,000
Miscellaneous freight from San Francisco.....	25,000
Miscellaneous freight from Stockton.....	5,000
Total.....	66,000

REPORT OF 1886.

SACRAMENTO RIVER. (Page 1,926.)

COMMERCIAL STATISTICS.

The following statistics are furnished by Messrs. Thomas Dwyer and A. Foster, of Sacramento, for the year ending June 30, 1886:

By boats of Sacramento Transportation Company—	
From San Francisco to Sacramento:	Tons.
Merchandise.....	17,698
Lumber.....	25,000
Coal.....	3,760
From Sacramento to San Francisco:	
Brick.....	55,500
Merchandise.....	3,760
From San Francisco to upper Sacramento:	
Merchandise.....	12,575
Lumber.....	8,500
From Sacramento to upper Sacramento, merchandise.....	2,750
From upper river:	
Wheat, barley, and flour.....	94,549
Wool, broom-corn, and hay.....	3,750
Wood.....	25,000
By boats of Southern Pacific Company:	
Between San Francisco and Sacramento (north).....	37,638
Between Sacramento and San Francisco (south).....	15,679
Trading boat "Neponset":	
From Sacramento to upper Sacramento River, merchandise.....	1,500
From upper river to Sacramento, wheat and barley.....	1,000
S. F. S. Company and steamers "D. E. Knight," "Silvia," and "Daisy":	
From upper river to Sacramento, wheat and barley.....	10,433
Boats of California Transportation Company:	
From lower Sacramento to San Francisco, fruit, produce, and merchandise.....	46,419
Total.....	365,512
Between lower Sacramento and San Francisco, passengers.....	11,600

The following statistics for the Feather River are furnished by Mr. D. E. Knight, of Marysville:

Wheat from landing on Feather River to Nevada warehouse, Port Costa, Wheatport, Vallejo, and San Francisco.....	Tons.
Hides, pelts, tallow, potatoes, fruit, and other merchandise from Marysville and various landings on Feather River to San Francisco and Sacramento.....	10,497,333
Merchandise carried from San Francisco to Marysville and way landings.....	1,928
Total.....	8,057,260
	20,482,333

SAN JOAQUIN RIVER. (Page 1,924.)

Freight shipped to and from the city of Stockton, via the San Joaquin River, during the year ending June 30, 1886:

EXPORTS.

Wheat, barley, and other cereals.....	Tons.
Flour and mill stuff.....	92,250
Vegetables, potatoes, onions, etc.....	60,325
Fruit and grapes.....	30,000
Carriages, furniture, and agricultural implements.....	5,000
Paper.....	1,250
Leather.....	1,200
Wine and brandy.....	1,000
Hides, pelts, and glue stock.....	500
Miscellaneous freight.....	500
Total.....	18,000
	210,025

IMPORTS.

	Tons.
Agricultural implements	4,000
Miscellaneous machinery and hardware	25,000
Paper stock, chemicals, etc.	1,000
Hardwood lumber and carriage stock	1,500
Building and fencing lumber	80,000
Coal	40,000
Lime and cement	1,650
Tan bark	4,000
Miscellaneous freight	30,000
Total	187,150

Freight transported by steamers and barges upon the upper San Joaquin River during the year ending June 30, 1886:

DOWN FREIGHT.

	Tons.
Wheat to San Francisco	25,000
Wheat to Stockton	15,000
Hay, potatoes, and other agricultural products	2,000
Wool	800
Wood	1,500
Total	44,300

UP FREIGHT.

	Tons.
Lumber from San Francisco	2,000
Lumber from Stockton	2,000
Miscellaneous freight from San Francisco	8,000
Miscellaneous freight from Stockton	17,000
Total	29,000

MOKELUMNE RIVER. (Page 1,925.)

The following statistics are furnished by the California Transportation Company, which controls the steamer business on the river:

Freight carried during the year ending June 30, 1886, to and from points on the Mokelumne River—tons	28,000
Passengers	960

Besides the above there are small schooners, running irregularly, to bring down bricks, hay, and produce. About one million bricks are shipped down annually, but it has not been possible to get the details for the hay and produce.

REPORT OF 1887.

SACRAMENTO RIVER. (Page 2,445.)

STATISTICS.

The following statistics are furnished by Messrs. Thomas Dwyer and A. Foster, of Sacramento, Cal., for the fiscal year ending June 30, 1887:

By boats of Sacramento Transportation Company:	Tons.
From San Francisco to Sacramento, merchandise.....	18,560
From San Francisco to Sacramento, lumber.....	26,500
From San Francisco to Sacramento, coal.....	4,200
From Sacramento to San Francisco, bricks.....	51,000
From Sacramento to San Francisco, merchandise.....	4,800
From San Francisco to upper Sacramento River, merchandise.....	14,500
From San Francisco to upper Sacramento River, lumber.....	11,600
From Sacramento to upper Sacramento River, lumber.....	1,250
From Sacramento to upper Sacramento River, merchandise.....	4,200
From upper Sacramento River, wheat and barley.....	64,650
From upper Sacramento River, wool, broom-corn, and hay.....	3,450
From upper Sacramento River, wood.....	26,400
From upper Sacramento River, miscellaneous produce.....	3,250
By boats of Southern Pacific Company:	
Between San Francisco and Sacramento (north).....	39,088
Between Sacramento and San Francisco (south).....	18,198
By trading boat "Neponset":	
From Sacramento to upper Sacramento River, merchandise.....	2,000
From upper Sacramento River, wheat and barley.....	1,000
From upper Sacramento River, potatoes, fruit, and beans.....	1,500
Total.....	296,146

FEATHER RIVER. (Page 2,446.)

Statistics of trade on the Feather River for fiscal year ending June 30, 1887:

From San Francisco and Sacramento to Marysville and way landings:	
Hay, tons.....	17.6
General merchandise, tons.....	6,344.8
Posts.....	9,163
Laths.....	246,000
Lumber, feet.....	853,797
Shingles.....	751,000
From Marysville and points on Feather River to San Francisco and way landings:	
Hay, tons.....	100
Wool, tons.....	27.3
Broom-corn, tons.....	42.2
Grain, tons.....	4,522.4
General merchandise, tons.....	928
Hops, tons.....	40.8
Lumber, feet.....	300,000

RECAPITULATION.

Freight, up and down, tons.....	12,023
Lumber, up and down, feet.....	1,153,797
Laths, up and down.....	246,000
Shingles, up and down.....	751,000
Posts, up and down.....	9,163
Money receipts for freight carried:	
Up.....	\$22,504 64
Down.....	12,326 24
Total.....	\$34,830 88

SAN JOAQUIN RIVER. (Page 2,440.)

STATISTICS.

The following statistics are furnished by Mr. R. E. Wilhoit, Secretary of the San Joaquin County Board of Trade, at Stockton, Cal.:

Freight shipped to and from the city of Stockton, via the San Joaquin River, during the fiscal year ending June 30, 1887:

EXPORTS.

	Tons.
Wheat, barley, and other cereals	93,000
Flour and mill stuff	60,000
Vegetables, potatoes, onions, etc.	30,000
Fruits and grapes	5,000
Furniture, carriages, and agricultural implements	1,000
Paper	1,200
Leather	1,500
Wine and brandy	750
Hides, pelts, and glue stock	500
Miscellaneous freight	18,000
Total	210,950

IMPORTS.

	Tons.
Agricultural implements	4,000
Miscellaneous machinery and hardware	25,000
Paper stock and chemicals	1,200
Hardwood, lumber, and carriage stock	1,500
Building and fencing lumber	80,000
Coal	45,000
Lime and cement	1,700
Tan bark	4,000
Miscellaneous freight	30,000
Total	192,400

Freight transported by steamer and barges upon the upper San Joaquin River during the fiscal year ending June 30, 1887:

DOWN FREIGHT.

	Tons.
Wheat to San Francisco	25,000
Wheat to Stockton	15,000
Hay, potatoes, and other agricultural products	2,000
Wool	1,000
Wood	1,500
Total	44,500

UP FREIGHT.

	Tons.
Lumber from San Francisco	2,000
Lumber from Stockton	2,000
Miscellaneous freight from San Francisco	8,000
Miscellaneous freight from Stockton	17,000
Total	29,000

REPORT OF 1888.

SACRAMENTO RIVER. (Page 2,133.)

Statistics for eleven months ending May 31, 1888, furnished by Captain Dwyer, President Sacramento Transportation Company:

	Tons.
Up freight carried by boats, consisting of merchandise, lumber, and coal	89,010
Down freight, consisting of bricks, merchandise, broom-corn, hay, wheat, barley, wood, corn, and other products	203,352
Total	283,362

SAN JOAQUIN RIVER. (Page 2,131.)

Statistics for eleven months ending May 31, 1888, furnished by the Hon. H. J. Corcoran, Manager San Joaquin Improvement Company:

Wheat, tons.....	134,638	Merchandise, tons.....	30,000
Coal, tons.....	44,000	Paving stones, tons.....	15,000
Sundries, tons.....	4,580	Bricks.....	2,000,000
Potatoes, tons.....	40,000	Lumber, feet.....	21,545,000
Flour, tons.....	58,000	Wool, bales.....	6,000

MOKELUMNE RIVER. (Page 2,131.)

Statistics for eleven months ending May 31, 1888, furnished by the Secretary of the California Transportation Company:

Merchandise carried, tons.....	1,025
Grain and produce carried, tons.....	35,000
Passengers.....	1,600

REPORT OF 1889.

SACRAMENTO RIVER. (Page 2,488.)

STATISTICS OF TRADE.

The following is the amount of freight carried by the Southern Pacific Company's steamers, running on the Sacramento River between San Francisco and Sacramento, during the past year, as furnished by them:

Freight carried north.....	Pounds.
Freight carried south.....	95,370,333
Total carried.....	48,255,564
	143,625,897

The following is the amount of freight carried by the Sacramento Transportation Company's steamers from June 1, 1888, to May 31, 1889:

Merchandise, lumber, and coal, San Francisco to Sacramento.....	Tons.
Merchandise and bricks, Sacramento to San Francisco.....	55,870
Wheat, etc., upper Sacramento River to San Francisco.....	59,350
Merchandise, etc., San Francisco to upper Sacramento River.....	166,381
Total tonnage carried.....	31,650
	313,251

Total tonnage of freight carried on the Feather River during the past year 27,121

SAN JOAQUIN RIVER. (Page 2,485.)

The accompanying statistics of trade for the San Joaquin River for the past year have been compiled by Hon. H. J. Corcoran, of Stockton:

Wheat, tons.....	115,000	Potatoes, tons.....	20,000
Coal, tons.....	46,000	Flour, tons.....	46,000
Bricks.....	6,000,000	Lumber, feet.....	30,000,000
Sundries (fruits and vegetables), tons.....	4,500	Wool, bales.....	2,000
Leather, paper, hides, paper stock, ocher, etc., tons.....	15,000	Merchandise, tons.....	50,000
		Passengers.....	55,000
		Wood, cords.....	3,000

NAVIGABLE WATERS IN CALIFORNIA.

Hon. B. F. Tuttle, Commissioner of Transportation, referring to the "Navigable Waters in California and their Influence on Rates of Transportation," says, at page 49 of his report for the years 1877-78:

Fortunately for this State, Nature has been more liberal in providing waterways for the free use of our people, for transportation purposes, than in many other portions of our common country. Following are some statistics of the tonnage which is employed upon the inland navigable waters and in the coast trade, which will serve to show what influences operate to keep the cost of transporting the products of the agricultural portion of the State to market at low rates. Moreover, they will also show that private capital has not hesitated to seek investment in that species of property. Such being the fact, the State cannot be too careful in guarding against the obstruction of its great waterways, and every legitimate effort should be made, not only to preserve, but also to improve their navigation, as the sure and safe method of protecting her producers from high rates of transportation. * * * A judicious system of improvement of the inland waters of this State would do more to keep the cost of transporting its products to market at low rates than scores of penal enactments and inflexible tariffs for the regulation of charges by transportation companies. The favored location of most of our agricultural and timber lands renders extortionate rates impossible, if the navigable waters of the State are cared for as their importance warrants.

The following places on the California Pacific Railroad, from their proximity to navigable waters, are enabled to ship their freights at rates fixed by the cost of water transportation: Napa, Suscol, Vallejo, Benicia, Bridgeport, Suisun, Elmira, Batavia, and Dixon.

The Northern Railway, located on the west side of the Sacramento River, and completed as far up as Willows, competes for the business at the following places located on the river: Knights Landing, Elk Horn, Monument, Bostwick Ranch, Smith Ferry, Three Rivers, Colgrove, Poker Bend, Mosquito Ranch, George Howell's, Big Orchard, Minis Ranch, Big Eddy, Dry Slough, Budd Ranch, James Powell's, Nordyke's, Perdew's, Eddy's, Grimes', James Wilson's, Twenty-Mile Bar, Grand Island Mill, Sycamore, Meridian, Moons Ferry, Butte Creek, Colusa, Sherman's, Randall's, Reynolds', Nine-Mile House, Manhattan, Boggs', Princeton, Butte City, Call Ranch, and other points on sloughs leading off from the river.

The tariff on the Central Pacific system is influenced by the Sacramento River above Jacinto, at Hite's, Parrott's, Dayton, Monroeville, Reade Landing, Chico, Bidwell's, Walsh's, and other points as far north as Red Bluff, and as far south as Firebaugh Ferry, in the San Joaquin Valley, including Hills Ferry, Salt Slough, Grayson, San Joaquin City, Point of Timber, Antioch, New York, Pittsburg, Pacheco, Martinez, and other points down to Oakland, and south to San José. On the Northern Division of the Southern Pacific Railroad, similar examples might be given.

At page 54, he says:

As a rule, no railroad can supersede transportation by water, unless it can perform the like service more cheaply and advantageously; and when this happens, it follows that the shipper reaps the benefit. No one at this time would advocate a statutory prohibition of competition, although that is not wholly free from irritation, by producing "discrimination."

It has been suggested and recommended that competition in this State be fostered, even by the establishment and maintenance of river and ocean lines of steamers, with rates fixed by the State, and that State aid be given to maintain such rates when not remunerative.

At page 58, he says:

In this State, with few exceptions, one single corporation has undertaken to supply railroad facilities for the whole people. In doing this, lines of railroad have been projected and constructed through districts of country offering few inducements for profitable traffic. These lines traverse the principal valleys through which run, also, the two great watercourses of the State. They also skirt the great bays and estuaries leading into rich interior valleys. Bordering upon and adjacent to these inland waterways, extending back for a distance of from five to fifteen miles, lies the greater part of the productive portion of California. From this may also be said of the agricultural land along the

coast, the products of which find their way to market upon the ocean. Upon these waterways ply every species of steam and sail craft adapted to their navigation, and it is not an overestimate to say that three fourths of the agricultural and nine tenths of the forest products reach the markets independent of the railroads; or, in other words, the rates for transporting them are determined by the facilities afforded by these means of transportation.

If these water facilities did not exist, the railroads would indeed have a perfect monopoly of the carrying trade. With these agencies, however, effectually preserved, offering as they do opportunities for profitable traffic to the water craft so far as the carrying of the products of the soil to the general markets and of supplies to the interior is concerned, there is not much to fear from railroad monopoly.

At page 61, he says:

To illustrate this subject, take a special case: San Francisco and Sacramento are connected by navigable waters, and in the exchange of commodities between the two cities they have always the benefit of cheap transportation. A railroad one hundred and fifty-one miles in length connects them, and passes through a number of interior towns heretofore having imperfect inter-communication. By rail one of these places (we will call it Galt) is located twenty-seven miles from Sacramento and one hundred and twenty-four miles from San Francisco. How has it been affected by the construction of the road? Before its construction, freight from San Francisco destined for Galt was shipped to Sacramento by water, thence by wagon to Galt. Since the completion of the road, there are two routes to Galt from San Francisco—one by rail direct, the other by water navigation to Sacramento, thence by rail. Taking the water route, the rate for shipping to Galt is found by adding to the water rate from San Francisco to Sacramento the rail rate from Sacramento to Galt. The latter rate is much below the former rate charged by wagon, and to the extent of this difference the shipper at Galt has been benefited by the building of the road, not to mention the greater convenience and saving in time, of which he now receives the benefit.

There would be no complaint if the road terminated at Galt, but a new route having been opened to Galt direct from San Francisco, one hundred and twenty-four miles, gives rise to all the trouble. The railroad is obliged to carry freight from San Francisco to Sacramento via Galt at the low water rate, which is below the average cost of railroad transportation; but if it derives a small profit from this source, it is enabled to make a reduction in rates between San Francisco and Galt direct, and between Sacramento and Galt. It is obliged, however, to charge the shipper at Galt more per ton per mile for the distance of one hundred and twenty-four miles, than is charged per ton per mile to Sacramento, but the total charge can in no case exceed the sum of the water and rail rate from San Francisco to Galt via Sacramento, else the latter would be the preferred route. It cannot be contended that it is unjust to the shipper at Galt because he is charged more proportionately than the shipper at Sacramento, who always had the benefit of the water rate. To do so would be to compel common carriers to expend their money in overcoming natural obstacles, and in placing the benefits arising therefrom at the disposal of those less favorably situated.

Railroads cannot successfully compete in the transportation of freights with carriers on navigable waters. The principal element utilized by the latter costs them nothing, while the former is compelled to make a heavy expenditure before he can move a bale of goods.

At page 75, he says:

The statistics relative to our inland commerce, hereinbefore presented, will serve to demonstrate the urgent necessity in the interest of commerce, as well as of nearly all other industrial pursuits, of preserving and improving the navigable waters of the State. This is a subject which the Legislature can take cognizance of, and the attention of that department of the Government is directed to its consideration.

EXTRACTS FROM THE PROCEEDINGS OF THE RIVER
CONVENTION

HELD IN THE CITY OF SACRAMENTO, JANUARY 17, 1890.

At a meeting of the Sacramento Board of Trade held on December 26, 1889, E. K. Alsip introduced resolutions, which were unanimously adopted, and which provided for the calling of a convention of representatives from the many counties bordering upon the navigable portions of Sacramento and San Joaquin Rivers and their tributaries.

In accordance with these resolutions, a River Convention was held at the Fireman's Hall in the city of Sacramento on January 17, 1890. It was a representative gathering of men from the interested counties. P. E. Platt, President of the Sacramento Board of Trade, in opening the River Convention, said:

GENTLEMEN OF THE CONVENTION: The business which has called you together to-day is of great importance to California and the Pacific Coast. The two largest rivers in the State are in a very bad condition. Their beds are rapidly filling up, their banks overflowing, and their usefulness as natural highways for navigation is greatly impaired and apparently about to be destroyed.

Some of their important tributaries are in a no less deplorable condition. There is only one source to which we can go for relief, only one power that is able to restore our rivers to their former condition and protect them in the future. Many of you have conflicting views, possibly conflicting interests, but upon some points I am sure you are all agreed, and on some matters your interests are all identical. We may not all be equally wise as to how this subject should be treated, what methods should be adopted, what plans followed, but there are some things which we all know equally well, and it is to consider them that you are brought together to-day.

In the first place we all know that the grand natural highways of commerce are of vital importance to our State, the Pacific Coast, and the United States. We all know that originally when California entered the Union these rivers for a long distance were navigable and deep enough to allow large ocean-going vessels to ascend them. We know at the present time that only the smallest flat-bottomed vessels can make use of them. We are all equally well informed as to the fact that the responsibility rests upon the general Government, and that it is alone competent to deal with the question and to restore these rivers. I take it that the only business that should absorb our attention to-day is that of presenting this matter to the Congress of the United States in the most forcible manner possible. It is unnecessary for us to discuss, as it seems to me, any of the various plans which able engineers might present to us; it is unnecessary for us to expatiate upon the causes that have operated to fill the rivers or to suggest methods for their improvement. All this can be left to the Government. * * *

Marsden Manson, Chief Engineer of the State Board of Harbor Commissioners, was added to the Committee on Resolutions, and was invited to address the Convention, which he did as follows:

MR. PRESIDENT AND GENTLEMEN: Under Article I, Section 8, of the Constitution of the United States, and through the agency of both general and special laws, Congress has assumed the control of the navigable waters since the organization of our Government. In the matter of improving navigation, this authority has generally been exercised through the War Department, and in the absence of employment in fortifying the seacoast, the corps of engineers has had charge of this work.

In special cases where very important work has been done, as on the Mississippi and Missouri Rivers, this duty has been assigned to a special Commission. California rivers fell under the jurisdiction of Congress in 1848, and this control was specially reserved in the Act of admission.

It is not necessary to recall to this Convention their primal condition nor the causes operating to impair their usefulness, but in order to review the matter fully it is necessary to state that partly through ignorance of what was being done, and partly through neglect, the California rivers have almost been irreparably damaged. It is not out of place to call your attention to the way these injuries were wrought, and to the benefits accruing

to the country at large by this sacrifice of California's great free highways. California has furnished to the world \$1,190,000,000 in gold. From this vast sum has been coined 50 per cent of the gross gold coinage of the United States mints since the organization of the Government. Its absence or withdrawal at times in the past would have wrecked the credit of this nation, the wealthiest on the earth.

During the mighty struggle from 1861 to 1865 California enterprise poured the precious metals into New York, at the rate of \$1,000,000 per week. In thus furnishing the sinews of war and industry our great free highways of commerce were damaged almost beyond repair. Of late years it is often urged that water transportation is not the service to commerce that railroads are; but the refutation of this is found in the fact that the coal mined on the navigable tributaries of the Mississippi is delivered at New Orleans at such rates as to cost the consumers from \$3 40 to \$3 80 per ton. What railroad would do this? The opening of the Mississippi River by Captain Eads in 1879, saved \$80,000,000 in freights and fares to the residents of that valley in 1880.

The value of that highway is beyond our comprehension. All have heard of the great effect upon the world's commerce wrought by the Suez Canal, yet within our own borders, between two fresh-water lakes, is a little canal, only a few miles long, which carries more tonnage per year than the great Suez Canal. The fact is not blazoned abroad. Perhaps there are prudential reasons for the silence. Yet this Sainte Marie Canal, connecting Lakes Superior and Michigan, does this service.

We are too prone to follow the system of reckoning the value of river transportation upon what it actually carries, instead of upon the true basis of what its existence as a free highway causes the gross volume of freight to be carried for. To fully present this potent fact to this Convention, the accompanying map has been prepared. The curves laid down thereon embrace those areas over which grain can be laid down in San Francisco for \$1, \$2, \$3, and \$4 per ton. The various lines of water and rail transportation are also shown. An examination of this map reveals some interesting facts.

First, that grain from Portland, Oregon, gets to San Francisco cheaper by from 25 to 50 cents per ton than from San José; that grain from Santa Barbara ports is as cheaply transported to San Francisco as from Niles. The \$2 per ton curve embraces about 5 per cent of the gross wheat crop of the United States. The water rate of \$1 50 per ton should exist from Red Bluff on the Sacramento to Hills Ferry on the San Joaquin, if Congress will treat these rivers with the same liberality as it yearly treats the rivers of even less importance in other States. Considering the conditions and circumstances under which these rivers were deprived of their primal usefulness, California has now the right to stand in the halls of Congress, not as a petitioner, but with a just and equitable demand that in these times of peace and abundance the Government shall protect and restore her rivers, and this not only in their pristine value as free highways forever, but enlarged and extended by science to the farthest limits possible.

* * * * *

After recess, Mr. Jewett, of Marysville, Chairman of Committee on Resolutions, reported the following memorial, which was unanimously adopted:

To the honorable Senate and House of Representatives, in Congress assembled:

WHEREAS, The history of the Sacramento and San Joaquin Valleys shows conclusively that up to about 1860 the Sacramento, San Joaquin, Feather, and Mokelumne Rivers, the great natural water highways and drains of these valleys, were navigable for vessels of large burden, drawing deep water, and were, therefore, for the purposes of cheap transportation and rapid drainage, of great value and vast commercial importance to the people of the State of California; and whereas, since 1860 the channels of these rivers have been gradually filled by deposits of sand and gravel derived from and being the direct, inevitable result of hydraulic mining operations permitted until recently by the Government of the United States, and other causes, until now their availability for navigation is, throughout some portions of their course, wholly destroyed and in the remainder greatly impaired, with the certainty of complete destruction if not properly treated; and whereas, the navigability of these rivers can only be restored and maintained by the immediate inauguration and prosecution of a system of treatment of their channels and banks by the Government of the United States, which rightfully reserved charge and control of all navigable streams in California; therefore, be it

Resolved, By the representatives of the people of the Sacramento and San Joaquin Valleys and the city of San Francisco in Convention assembled, that Congress be and is hereby requested and urged to provide for the appointment of a special Commission, similar to the Commission now in charge of the Mississippi River, whose duty shall be to immediately take charge of the Sacramento, San Joaquin, Feather, and Mokelumne Rivers and their navigable tributaries, and devise, adopt, and carry out such system of treatment of said rivers as will, in their opinion, restore them to their original condition as navigable streams; and further to appropriate the sum of at least \$3,000,000 to be expended by such Commission in the immediate prosecution of such methods of treatment as may be by them adopted; and be it further

Resolved, That copies of these resolutions be immediately transmitted to our Senators and Representatives in Congress, and they are hereby requested to promptly present the matter to Congress, and to use all honorable means to secure such enactments by that body as are herein requested, in the full belief that such action will result in affording the relief desired.

MISCELLANEOUS.

A copy of the following letter, to-wit:

OFFICE OF EXAMINING COMMISSION ON RIVERS AND HARBORS, }
SACRAMENTO, CAL., August 12, 1890. }

To ————:

SIRS: For the purpose of showing the importance of the Sacramento and San Joaquin Rivers as commercial highways, and the necessity of largely increased appropriations by the general Government for their improvement, this Commission has decided to issue under same cover with its report an appendix, consisting of statements from as many reliable sources as possible of the tonnage of these rivers and the value of the same, together with the resources, etc., of the country adjacent thereto, and such other data as may be deemed appropriate.

You are courteously invited to coöperate and to forward your statement at the earliest possible date.

Very respectfully yours,

EXAMINING COMMISSION ON RIVERS AND HARBORS.

By J. J. CRAWFORD,
Secretary.

was sent to the Chamber of Commerce, Produce Exchange, Boards of Trade in San Francisco, Sacramento, Stockton, and Marysville, to the several transportation companies operating steamers on these rivers, and to many prominent men conversant with these rivers and valleys.

Pertinent extracts from the many replies received are herewith appended:

SOUTHERN PACIFIC COMPANY (PACIFIC SYSTEM.) }
OFFICE GENERAL FREIGHT AGENT, }
SAN FRANCISCO, August 20, 1889. }

To the Examining Commission on Rivers and Harbors, Sacramento, Cal.:

DEAR SIRS: Your favor of August twelfth duly received. A review of our statistics show that from July 1, 1889, to June 1, 1890, the aggregate tonnage handled by this company's steamers on the Sacramento River route was 134,620,000 pounds. Total number of passengers carried during the year 1889, 26,172.

Yours truly,

C. F. SMURR,
General Freight Agent.

SACRAMENTO, August 23, 1890.

To the Examining Commission on Rivers and Harbors:

SIRS: According to your request I submit the following estimate of the gross tonnage transported on the Sacramento River, shipped to and from San Francisco and Port Costa, for the year 1889:

	Gross Tons.
30,000,000 feet lumber	52,000
20,000,000 bricks	55,000
Merchandise shipped to and from Sacramento, including fruit and produce	156,000
Coal to Sacramento	15,000
Amount of tonnage handled by the California Transportation Co., Nelson & Anderson, per their report:	
Merchandise	73,750
Passengers	18,000
Up river tonnage above Sacramento City:	
Wheat, Sacramento and Feather Rivers	140,000
Merchandise	10,400
Lumber, 4,160,000 feet	3,120
Wood, 6,000 cords	9,000
	514,270

Yours truly,

J. H. ROBERTS,
Secretary Sacramento Transportation Company.

STOCKTON, CAL., September 28, 1890.

To the Examining Commission on Rivers and Harbors:

SIR: In accordance with your request that I furnish you with such information as lies in my power regarding the business carried on upon the San Joaquin River, the treatment which the river should receive in order to preserve its navigable character, and such other matters as are necessarily connected with it, I desire to say: The San Joaquin River is the natural highway of the San Joaquin Valley, which, while not now densely populated, is destined within a short time, as time goes in the history of Governments, to be the home of several millions of people.

From its point of junction with the Sacramento River, where both pour their waters into Suisun Bay, to its extreme head of navigation, is a distance considerably in excess of two hundred and fifty miles. It drains an area equal to about one half that of the original thirteen States of the Union; and it is one of the most important streams, in the relation which it bears to the cheapening of transportation rates, in the United States.

There have always been, and are now operated upon it, lines of steamers entirely independent of and in competition with the railroad companies whose lines traverse its great valley. The result of this is seen in the lower rate of transportation enjoyed by those residing on the lower portion of the river between Stockton and Hills Ferry, where vessels navigate, with difficulty it is true, during an average of seven and one half months of each year.

The river, in its present condition, does not afford the opportunity for cheap transportation that it would were proper attention given to its needs, and reasonable sums of money expended in the rectification of its channel. Steamboat companies who are obliged to drag boats and barges over sand bars by means of steam capstans, whose barges are at any time liable to be damaged by overhanging trees or sunken snags, are obliged in self-defense to take these risks into consideration in making up their freight charge.

From Hills Ferry to Firebaughs Ferry the river has been allowed to fall into a condition which renders it almost valueless for purposes of navigation. This state of affairs has been brought about by numerous small streams, which, by diverting the water from the river, diminish the current velocity to such an extent as to cause the deposit of sand in the form of sand bars. From a point called Dover, for thirteen miles toward Firebaughs, the water in the river at no time is deeper than thirty-two inches. But a few years have passed since this portion of the river was in better condition than the lower portion, and boats drawing five and one half to six feet of water could run to Firebaughs Ferry without difficulty. Beyond Firebaughs Ferry, for a long distance, the river has always been, and now is, navigable; the trouble lies in the fact that boats are not able to pass the stretch of shoal water which I have just mentioned. The expenditure of a very small sum of money in the closing of the sloughs above mentioned would result in the rectification of the channel, and in deepening it to an extent which would make it once more the great highway which it was.

Above Firebaughs, there makes off to the south an important arm of the river, known as Sycamore Slough, which always has been and now is in a navigable condition.

With all these disadvantages to contend with, and with the added disadvantage that the river is navigable to Firebaughs not longer than six weeks each year, boating is profitably conducted at rates ranging from 40 to 60 per cent below those charged by the railroad companies.

On the lower San Joaquin River, and by that I mean that portion lying between Hills Ferry and Suisun Bay, the navigable character of the river has been seriously impaired by reason of two large crevasses, the one known as Paradise Cut, the other as Lairds Slough. The water which flows out of Lairds eventually finds its way back to the river, but in so doing spreads over large tracts of territory. Out of Paradise flows a quantity of water considerably in excess of that which finds the natural channel of the river. The effect of this is the impairing of navigation below Stockton, the overflow of tens of thousands of acres of land productive beyond comprehension, capable of sustaining an enormous population, and yielding to the labors of the husbandman almost every variety of food products now known to commerce.

Items have been inserted in the River and Harbor Bill, which, as I write, is before Congress for consideration, appropriating money for the partial closing of Paradise, and the entire stoppage of Lairds. Should this become a law, and the amount of money determined to be necessary by the Government engineer proves sufficient for the purpose indicated, these two large difficulties will be removed from us.

In the consideration of this important problem, it has been the policy of California to wait for the National Government to appropriate such money as was deemed necessary for the improvement of her navigable streams. The sentiment aroused by the passage of what was known as the Drainage Act, in 1880, adversely to that measure, would seem to indicate that the popular prejudice in opposition to the appropriation of State money, for the preservation of our navigable streams, is stronger than the common sense doctrine which demands the preservation of Nature's highways at the cost of the State, and regardless of expense. Forty years' constant begging at the doors of the National Treasury have brought to the people who dwell along the banks of the San Joaquin River the niggardly sum of \$275,000; less money than could be, and should have been, profitably expended during each year of the last decade.

It has been estimated by engineers who, by reason of their learning and eminence in their craft, are entitled to speak with the voice of authority, that for \$2,500,000, judiciously expended, the San Joaquin River could be made navigable during the entire season. If

this were to come to pass, the saving to the people of the counties of Merced, Stanislaus, Fresno, and Tulare, based upon the present population and productions of those counties, between the rate charged by the railroad companies and that at which the work could be done by water transportation companies, would amount to the enormous sum of \$3,593,400 per annum. It is a significant fact, worthy of consideration in this connection, that the freight rate between Stockton and San Francisco, by rail, is very nearly three times the same rate by water. The water rate between these two points is the lowest rate, for an equal distance, which prevails anywhere in the United States. If this advantage, enjoyed by the people of Stockton and other points on the lower San Joaquin River, were shared by those who reside in the other counties which make up the great San Joaquin Valley, the net annual saving in transportation rates would be more than sufficient to defray all the expenses incidental to the making of a navigable stream from one end of the San Joaquin River to the other.

Should the project which has been discussed by Congress, of making immense storage reservoirs in the mountains on each side of the valley, be carried out, the problem of perpetual navigation would be made much easier of solution.

Judging from our past failures to secure suitable appropriations from the general Government, notwithstanding that we have had complete and satisfactory reports from the engineers in charge; that our people have sent men and petitions without number; that our members of Congress have labored diligently, and in some cases solely, for the accomplishment of this purpose; that delegations of citizens have been sent to Washington in an endeavor to secure large appropriations; and that in spite of all of these, we have most signally failed, it would seem that it would be the part of wisdom for us to discard the niggardly policy of asking the general Government to do this work, and that we should do it ourselves. It is true, that in the process of time, by constant and persistent effort, more money might be secured, but it has been demonstrated by years of bitter and expensive experience, that work of this kind cannot be done piecemeal, but must be commenced, prosecuted, and completed with vigor and without interruption.

An assessment of 10 cents upon \$100 on the property to be benefited, and lying in the counties of San Joaquin, Stanislaus, Merced, Fresno, and Kern, would produce in two years a half million of dollars more than would be required, according to the engineer's estimate, to make the San Joaquin River navigable for the entire distance of two hundred and fifty miles during the entire year. The difference between railroad and water rates, as they are now, would more than repay this amount of money each year, yielding, therefore, 100 per cent upon the investment. The burden, if borne by the whole State of California, as it should be if borne by any of her citizens, would fall so lightly as to be scarcely appreciable; and the governmental policy which refuses to do this because of a vague, dim, and uncertain idea that at some remote and uncertain time the general Government may be induced to do it, is open to serious criticism, and would, in private business, be characterized as foolish.

I cannot state with any degree of exactitude the amount of traffic which would move through the territory which I have mentioned, though a conservative estimate has, I believe, placed it in the neighborhood of three and one half millions of tons of freight.

As may be readily inferred from what I have before said, I am a strong believer in the theory that it is a duty which the State owes its people, that it improve and preserve all the navigable streams within its borders; but should the view prevail that this labor be left to be performed by the general Government, it is my opinion that the work of procuring suitable appropriations should be vigorously prosecuted; that there should be kept in the city of Washington, during the meeting of Congress, a committee of citizens, whose duty it shall be to devote their time to this matter exclusively. I believe that it should be the sole issue involved in the election of our Congressmen and Senators; under these circumstances we might hope for relief, but the disappointed hopes of an hundred other communities, whose necessities were apparently nearly, if not quite, as great as ours, warn us that we can expect but little from the Federal Government.

I have said nothing about the Sacramento River, Suisun, San Pablo, and San Francisco Bays, because others are infinitely better able to discuss their wants than I.

I wish to add to what I have already said regarding the amount of territory which could readily be made tributary to the San Joaquin River, that by the expenditure of a very moderate sum of money the tributaries of the San Joaquin, namely, the Stanislaus, Merced, and Tuolumne Rivers, could be made navigable to the point at which they issue from the mountains.

I sincerely trust that such public spirit will be aroused in connection with this matter as will lead to prompt measures being taken. The zeal and interest exhibited by your Commission gives bright promise of great good to be accomplished in the future.

Very respectfully, your obedient servant,

H. J. CORCORAN,

General Manager California Navigation and Improvement Company.

To the Examining Commission on Rivers and Harbors:

DEAR SIRS: Your communication dated August thirteenth, in which you request my views and such data as may bear on the value and importance of maintaining the navigability of our rivers, was duly received and has had my earnest consideration, and I beg to submit a few thoughts that may have escaped other and abler pens. Your mission and investigations covering objects of such vital importance to our State came not a day

too soon. Notwithstanding the multiplication of railroads throughout the United States, the matter of waterways for the transportation of the heavier products of the country is receiving annually more and more attention by the National Government. A cursory glance at the biennial river and harbor bills reveals the fact that the Government is very jealous of its water highways, and is appropriating large sums for their improvement, and the creation of artificial channels and the enlargement of others whose commerce has outgrown their capacity. The general Government is therefore fully committed on the question of water transportation, and as a consequence, prayers and petitions are numerous and in order, asking Congress to create, enlarge, repair, and improve the natural highways of the country in the interest of the producing classes. Every request for aid is accompanied by facts and figures showing the growth of the country, through which the appropriate committees and the general listener gets extensive and valuable information concerning the size and wants of his country.

There is not, I venture to say, in all this American continent a system of rivers so valuable and of such vast importance to their country as are the rivers of California, and yet, except quite recently, scarcely any notice has been taken of their condition at home or at Washington. Before we charge Congress with neglect we should blame ourselves with remissness, for that body and the appropriate departments know nothing, except as they are told by a suffering community.

When considering the importance of the Sacramento River and its navigable tributaries, the story to be told will overshadow nine tenths of the rivers of the East in commerce and prospects. This river cuts in two lengthwise a valley two hundred miles long and sixty wide, as productive a spot as the sun warms and illuminates on his ceaseless rounds. But this is not all; the mountain slopes tributary to it, of vastly greater extent and of equal fertility, yet almost untouched by the hand of man, will in the near future be the home of a thrifty and dense population, who will send their apples, pears, peaches, apricots, nectarines, grapes, wines, raisins, almonds, figs, oranges, and lemons to market through all the channels of commerce—the natural as well as the artificial—the heavier to go always by the water routes.

Notwithstanding the enormous pressure annually on the transportation facilities by the present products moving toward the sea, the present rate of development will require the facilities to be doubled, if not quadrupled, for several decades to come. The very substantial argument furnished by the millions of tons of wheat, flour, barley, hay, potatoes, and vegetables, and fruits of all kinds, together with horses, cattle, sheep, swine, poultry, etc., that are floated every day in the year down the Sacramento, and the lumber, and other heavy and bulky commodities returned, may well be left to the riparian proprietors, the cultivators of the matchless soil, and the able journals of the north.

What the Sacramento is to the whole valley, the Feather River is to the counties of Yuba and Sutter. From its entrance to the Sacramento Valley, to where it joins the larger river, it runs through as fertile a country as can be found in the State, and once was, and ought to be forever, navigable for at least fifty miles from its mouth, northward. The agricultural product of the two counties, and including a portion of Butte and Placer, annually, may with safety be placed at three hundred thousand tons; of this amount, fully one half, if not two thirds, would seek this river as an outlet, were it in condition to transport it. Sutter County, though one of the smallest agricultural counties in the State, grows annually about seventy-five thousand tons of wheat, and half as much barley, to say nothing of the other extensive products of its fertile farms, a large majority of which looks to the Feather River for egress. The great importance of this river to the farmers of the county may be illustrated by the fact that in 1880, no less than twenty thousand tons of wheat were stored in the warehouses on its banks at Yuba City, while many thousands of tons were drawn to its banks for shipment below this point, some of which remained for months for transportation, and until injured by the early rains. Several thousand tons were stored in Nicolaus and Vernon warehouses, and on the banks, and also on the banks of the Sacramento, along the western border of the county, all sharing the same fate of delay and injury from the elements.

Since then both rivers have so deteriorated in usefulness as to be almost innavigable during the autumn months of low water. The present condition of both rivers is a crying evil that demands the immediate attention of Congress; and let it be assured that millions of money are expended on less deserving rivers than those under consideration, and many of them frozen up half the year, while the California rivers are open every day the year round.

Very respectfully,

GEORGE OHLEYER.

YUBA CITY, August 25, 1890.

SAN FRANCISCO, September 5, 1890.

To the Examining Commission on Rivers and Harbors, Sacramento City:

GENTLEMEN: * * * It should be borne in mind that a very small proportion of the lands under consideration are capable of producing crops without artificial reclamation by the construction of substantial dikes to prevent overflows, and powerful steam pumps and a system of canals and ditches for the purpose of controlling superfluous seepage and rain water. While many attempts at such reclamation have been made, the number of the successful reclamations in California has remained very limited so far. It is, however,

safe to say that not one fiftieth part of the lands along the Sacramento and San Joaquin Rivers, capable of producing crops equally as good as those now raised on its banks, now bear crops. They are for the greater part, as yet, dreary wastes, covered by a dense mass of tules, the home of the beaver and otter.

In order to give some idea of the productiveness of similar lands, it should be borne in mind that the facilities afforded for underground irrigation are almost without parallel. As their level is below tide water, the water in the ditches can be kept at any desired level during the hot summer months, an immense advantage in this climate, where no rainfall occurs between the fifteenth of April and the fifteenth of October, and which, as a rule, dries out elsewhere all moisture of the ground to a depth five or six feet below the surface. Even during the driest summer months, the lands under discussion hold the moisture within a few inches of the surface.

The average crop on a tract of land in the Pearson Reclamation District, embracing eight thousand eight hundred acres on the left bank of the Sacramento River, twenty-two miles below Sacramento City, and in charge of the undersigned, has been as follows:

Potatoes	600 bushels per acre.
Beans	40 bushels per acre.
Onions	450 bushels per acre.
Alfalfa	8 tons per acre.

Peaches, Bartlett pears, cherries, and apricots are a marvelous success, both as to flavor and yield. Granting one hundred and sixty trees to the acre, the average crop of peaches is eight hundred baskets per acre, and of Bartlett pears is four hundred bushels per acre.

The actual yield, however, on several occasions, exceeded by actual count by far the above figures.

What the tonnage of these rivers will be, if once all of these lands will have been reclaimed, as they undoubtedly will be at no distant day, when thriving towns and villages will have sprung up, must remain a matter which can only be left to conjecture. * * *

Besides these dry sloughs, other *navigable sloughs*, also designed for the relief for flood waters, have, with incredible audacity, been dammed off and completely closed by adjacent owners. Tyler Slough, near Walnut Grove, and Jackson Slough, near Isleton, form two of the most alarming instances hereof. The latter, besides being a navigable stream, formed a relief for the combined flood waters of Steamboat Slough and Cache Creek, as it allowed the flood water to reach tide water in three miles, instead of the eighteen it has to travel now to reach it. * * *

One of the great difficulties encountered in attempting to remedy the evils hereinbefore portrayed, and in arriving at a more satisfactory state of affairs, is the fact that, while it is admittedly the duty of the National Government to maintain the *navigability* of the rivers in the Union, it very properly *refuses* its assistance to "reclaim lands," or protect them from overflow.

Another, closely connected therewith, is the answer to the question: "Granted that some central State power should be enabled to proceed to take steps looking toward the general reclamation of all lands capable thereof, how is that power to be appointed, and above all, how is it to raise the necessary funds wherewith to proceed?" * * *

Right here it may be proper to say that "reclamation" and "navigability," in other words, that the duty which the *National* and *State* Governments have to perform in this respect, are so *closely interwoven* that it would seem impossible to accomplish anything in the one direction without interfering with or affecting the other.

A few words may serve to explain this. If, a few days before the "Paine break" broke through last winter, one half mile below the city of Sacramento, on the right bank of the Sacramento River, the United States War Department had been applied to for assistance to prevent the occurrence of the threatened break, it would no doubt have answered with the exception: "That is reclamation; we are not interested." When, however, a few days later, the break widened and deepened, and became of such dimensions as to cause great fear that the river would change its course and form a permanent bar below the break and make navigation beyond that point an impossibility, the United States War Department, upon due application and careful consideration and examination, became possessed of facts which convinced it of its duty to direct its officers, in the interest of "navigability," to close that break with funds intrusted to it.

Will it yet occur to any one to say that the United States Government, looking out only for "navigability," was not interested in the Paine levee before it broke, or that it is not interested in every dike, its dimensions, location, maintenance, and strength, forming at a high stage of the water one of the walls of the navigable rivers in the Union?

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Very faithfully yours,

P. J. VAN LÖBEN SELS.

PRODUCE EXCHANGE, }
SAN FRANCISCO, August 19, 1890. }

To the Examining Commission on Rivers and Harbors, Sacramento, Cal.:

DEAR SIRS: I beg to acknowledge the receipt of your favor of the twelfth instant. * * The importance of these rivers to our farmers cannot be overstated, as the inclosed clipping will show:

"San Francisco is fortunate in having two such important allies of inland commerce as the Sacramento and San Joaquin Rivers, and tributary streams. Water transportation has always been found more economical than any form. Rivers and other waterways are not only good in themselves, but they always lower rates on all railways that they parallel. Secretary Friedlander of the San Francisco Produce Exchange has been making some figures to show the importance of the rivers above named as avenues for the flour and wheat shipments from the great grain valleys of the State to tide water. Out of the wheat crop of 1889, now nearly all marketed, he estimates that nearly three hundred and eleven thousand six hundred and fifty tons might have reached tide water by either the Sacramento or San Joaquin Rivers. The figures are made by actual receipts from these sections for the six months ending December 1, 1889, and the stocks on the banks of the rivers or tributary to the rivers on the first of December, 1889, most of which has since come to hand, or will eventually reach the city of San Francisco. These totals are as follows:

Sacramento River, tons.....	158,650
San Joaquin River, tons.....	153,000
Total tons.....	311,650

"The quantity is one fourth of the entire crop last year. It is a matter of considerable importance to know that there is direct competition between rail and water carriage for such a large proportion of the wheat crop of the State. * * * The waterways of California are none too numerous, and their continued free use as navigable streams should be jealously guarded at all points. Measures to improve navigation in these streams are always deserving of careful and considerate attention. * * * Reasonable rates of transportation are the hope of the agricultural interests on the one hand, and the salvation of the mercantile interests of the great cities on the other."

In general terms, one quarter of the wheat yield of California reaches tide water by way of the Sacramento and San Joaquin Rivers; and rail freights, for at least another one fourth of the crop, are to a certain measure influenced by this water transportation.

I remain, dear sirs, very truly yours,

W. FRIEDLANDER,
Secretary.

THE CHAMBER OF COMMERCE. }
SAN FRANCISCO, September 6, 1890. }

To the Examining Commission on Rivers and Harbors, Sacramento, Cal.:

DEAR SIRS: Your communication inviting us to submit our views and data in the matter of a much needed "appropriation for the improvement of the Sacramento and San Joaquin Rivers and their tributaries, showing the importance of these streams as commercial highways," was referred to our Committee on Internal Trade and Improvements; the Chairman of which has addressed us a letter, saying that the information desired is of such character as to involve more labor and research than the time allowed would permit us to undertake. Rather than place in your hands any information so incomplete that it would not be creditable to the Chamber, we respectfully ask your pardon for not being able to accede to your request.

Yours truly,

THOS. J. HAYNES,
Secretary.

CHICO, CAL., August 22, 1890.

To the Examining Commission on Rivers and Harbors, Sacramento, Cal.:

GENTLEMEN: I have your esteemed letter of the thirteenth instant. In reply permit me to say: * * * To restore and preserve the navigation of these important streams, the waters must be confined within proper limits, to be located from careful surveys by competent engineers. The best talent and experience should be employed. Any system that will so confine the waters, and restore and preserve the navigation, will, unwittingly, react on the lands and marshes that border or lie contiguous to these rivers, promote the health, and make it possible to reclaim vast areas of the best lands in the world which are now, on account of the debris which has filled and remains in the channels, annually inundated and converted into a desolation. If the United States will take care of the navigation, the State and its people can take care of the lands. The United States alone must take the lead—the labor is too vast for the State—the importance is beyond computation.

I have the honor to be very respectfully yours,

JOHN BIDWELL.

STOCKTON, CAL., August 15, 1890.

To the Examining Commission on Rivers and Harbors, Sacramento:

DEAR SIRS:

* * * * *

My experience of over thirty years in the wheat business, being most of that time also interested in steamers and barges engaged in transportation upon the San Joaquin River, proves most conclusively to me the constantly increasing traffic upon that channel, and also the absolute necessity of speedily taking intelligent action for the preservation of that invaluable thoroughfare.

The San Joaquin River drains a delta of immense area and of almost unparalleled productiveness, and the time is not far distant when an intelligent development of the agricultural capacities of the great San Joaquin Valley will increase its products almost indefinitely. To meet that condition of affairs, which is sure to come, the outlet for our products by cheap water communication *must be preserved*. The subject is one deserving the careful consideration of both the National Congress and the State Legislature, and I trust that your Commission may be able to present the matter in such a manner as to command the attention of our legislators, and prove to them most conclusively that liberal appropriations are necessary to perpetuate the navigation of the San Joaquin and Sacramento Rivers, and thereby protect the interests of the residents of the great interior basin of the State, and aid them to develop its latent wealth and increase its taxable property, until it becomes what Nature has undoubtedly designed it to be, one of the most thickly populated and prosperous regions in the United States.

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Very respectfully yours,

J. D. PETERS.

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